DIALECTIC OF UNDERDEVELOPMENT

- IMPERIALISM, CLASS AND STATE IN THE COFFEE INDUSTRY
  OF PAPUA NEW GUINEA

RANDAL G. STEWART

MAY 1986

A thesis submitted for the degree of Doctor of Philosophy of
The Australian National University
Statement

I hereby declare that this thesis is the result of my independent research and that all authorities and sources which have been used are acknowledged.

Randal G. Stewart
Acknowledgements

Many people help put a thesis together. It is a social product even though one person must in the end take responsibility for it. The social contribution includes assistance with and critique of the material itself and friendship and support when the going gets tough.

I was fortunate to have as a principal supervisor John Ballard, who was both a critic and friend when I needed him. It is certainly true to say that without his faith in and commitment to the project it might never have been completed.

John Girling and Dianne Bolton were also supervisors who devoted much time to the project. Their support is appreciated.

The thesis is for Georgina. Those who read material and offered helpful criticism or support include Amos Anyimadu, Hugh Collins, Stephanie Fahey, Christine Jennett, Daudi Mukangara, Marian Simms, Bill Standish, and Vincent Warakai.

Phillipa Greenfield assisted admirably with the research and Dianne Morrison, Margaret Tie and Patricia Arentz laboured long and hard on the presentation.

Fieldwork was funded by the Australian National University with valuable assistance from the University of Papua New Guinea.

Finally, to all the bureaucrats, business people and peasants who gave their time for interviews, I offer my thanks.
The thesis is in two parts. The first part is called the Dialectic of Underdevelopment. The aim of the theoretical chapter in the first part is to create a framework to demonstrate how the intersection of imperialism, class and state determines development and underdevelopment in the periphery.

Chapter One shows that the principal effect of imperialism is that it disarticulates peripheral economies. Politically, however, imperialism has an indeterminant effect on the periphery. Thus while imperialism does retard the development of the productive forces in certain industries it does not determine the form politics takes or the class struggle in the periphery. The peripheral state plays the role of 'midwife' to international capital in the periphery. In addition some general tools of class analysis, class location and class relations, are refined. It is argued that the agrarian transition, as outlined by Bernstein (1977), is the main class problem to be faced in the periphery. It is shown that classes are located in production, they achieve dominance through market or exchange relations and, in the periphery, the class structure is complicated beyond the two class schema. It is further argued that the state in the periphery is a differentiated state. The state can take a different form and function depending on imperialism and the class struggle in a sector or industry.

In the second part of the thesis the theory is tested with evidence drawn from a study of the global coffee industry and the domestic coffee industry in one small coffee producing country, Papua New Guinea. Chapter Two shows that the International Coffee Agreement (ICA) has received support from importers and exporters because: a) it has reinforced existing trading patterns to the advantage of big importers such as the USA and big exporters such as Brazil and to the detriment of small producers like Papua New Guinea; b) it has not undermined state sovereignty or determined class struggle in domestic coffee industries. The success of the ICA also depends on the 'midwife' role of member states because only states can 'police' the flow of coffee as it crosses state borders.

The domestic coffee industry of Papua New Guinea is the subject of Chapters Three and Four. Chapter Three, on the colonial coffee industry in Papua New Guinea, identifies the two dominant forms of production in the coffee industry, those of planters and smallholders, and shows that both have limits of accumulation and experience difficulties in making the agrarian transition. The chapter also shows how class relations in the industry, in particular the vertical
Integration of white planters in the coffee marketing chain, has discriminated against the small producer. The colonial state in Papua New Guinea was a Bonapartist state. In the colonial coffee industry this meant the state had a limited role to play in the development of the industry.

Chapter Four, on the post-colonial coffee industry, shows that while independence creates some new class forces (a black petty bourgeoisie and big peasantry) and new political actors (petty bourgeois nationalists and technocrats) the coffee industry has remained virtually unchanged in the post-colonial period. The post-independence technical structures in the industry, in particular the stabilisation fund and the coffee industry board are, like the Bonapartist state, transcendent over all classes in the coffee industry. As such they stymie the development of the dominant classes and appropriate surplus from the subordinate classes.

In conclusion, the thesis demonstrates that development and underdevelopment in the coffee industry of Papua New Guinea is based, without exception, on the exploitation of the smallholder. This is easy to assert but, as is evident in the thesis, class struggle is a subtle and complex process. A rigorous theoretical framework, such as the 'dialectic of underdevelopment' theory developed in the thesis, is needed to analyse the complex intersection of imperialism, class and state which creates underdevelopment and exploitation in the periphery.
# Table of Contents

## Introduction

**PART I - DIALECTIC OF UNDERDEVELOPMENT**

**CHAPTER ONE: THEORETICAL AND METHODOLOGICAL PROBLEMS IN THE STUDY OF THE DEVELOPMENT OF PERIPHERAL CAPITALISM**

- IMPERIALISM 10
- CLASS 16
- THE STATE 25
  - The Form of the State 27
  - State Constitution of Class Struggle 30
  - Function of the State 33
  - Political Analysis and the State 38
- METHODOLOGICAL PROBLEMS IN THE STUDY OF THIRD WORLD AGRICULTURE 40
- WHY STUDY THE COFFEE INDUSTRY? 44
- WHY STUDY PAPUA NEW GUINEA? 46
- THE COFFEE INDUSTRY IN PAPUA NEW GUINEA 50

## PART II - IMPERIALISM, CLASS AND STATE IN THE COFFEE INDUSTRY OF PAPUA NEW GUINEA

**CHAPTER TWO: THE TYPE AND FORM OF INTERNATIONAL COFFEE CAPITAL**

- Introduction 58

**DISEQUILIBRIUM IN WORLD COFFEE**

- Market failure and its Relations to the Type of International Coffee Capital 64
- Taste and Political Factors 69
- The International Coffee Agreement (ICA) as a Distinctive Form of International Capital 72


- Quota's 79
- Price and Production Control 90

**THE COST TO SMALL PRODUCERS OF ICA MEMBERSHIP - INSTITUTIONALISATION, LEGITIMACY AND THE ROLE OF THE STATE**

- Legitimation of the importer/exporter Cleavage 100
- The Role of the State 103
- Conclusion 111
CHAPTER THREE: THE COFFEE INDUSTRY IN COLONIAL PAPUA NEW GUINEA

Introduction to the Study of Coffee in Papua New Guinea 122

THE ORIGIN OF THE COFFEE INDUSTRY IN COLONIAL PAPUA NEW GUINEA

The Emergence of Household Commodity Production in the Coffee Industry of Colonial Papua New Guinea 131
The State and the Origins of the Coffee Industry in Papua New Guinea - Exigencies of lateness of Penetration 136

CLASS LOCATION IN THE COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

Plantation Agriculture 142
Smallholder Production 153

CLASS RELATIONS (OBJECTIVE) IN THE COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

Exporter Pinch Point 166
Processor and Coffee Buyer Pinch Points 169
The Failure of the Middle Peasantry 177

FORM AND FUNCTION OF THE STATE IN THE COLONIAL INDUSTRY OF PAPUA NEW GUINEA

The Department of Agriculture Stock and Fisheries (DASF) 186
The Coffee Marketing Board (CMB) 190

CLASS RELATIONS (SUBJECTIVE) IN THE COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

The 'Netting' Crisis of 1966/67 203
The 'Silent' Class Struggle 207
CHAPTER FOUR: THE COFFEE INDUSTRY IN POST-COLONIAL PAPUA NEW GUINEA

Introduction 236

DECOLONISATION AND THE TRANSITION TO POST-COLONIAL POLITICS IN THE PAPUA NEW GUINEA COFFEE INDUSTRY

The 1972 Crisis in the Coffee Industry 239
Transition Politics - the 1972 Election and the Political Demise of White Planters 244
Petty Bourgeois 'Nationalism' and the Role of Technocrats in the Papua New Guinea Coffee Industry 247

CLASS LOCATION IN THE POST-COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

Dominant Class Fractions - The Big Peasantry and the Petty Bourgeoisie 255

CLASS RELATIONS (OBJECTIVE) IN THE POST COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

Exporter Pinch Point 267
Processor Pinch Point 276
Coffee Buyer Pinch Point 286

FORM AND FUNCTION OF THE STATE IN THE POST COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

The Department of Primary Industry (DPI) 292
Technocrats and Coffee Politics - The Coffee Industry Board (CIB) 298

CLASS RELATIONS (SUBJECTIVE) IN THE POST COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

The 'Silent' Class Struggle in the 20 Hectare Coffee Development Program 312
Background to the 20 Hectare Coffee Development Program 314
20 Hectare Project Implementation 326
Conclusion 346

CONCLUSION

The Coffee Industry in Papua New Guinea 364
Theoretical Problems Resolved and Remaining in the Study of the Development of Capitalism 370

APPENDIX A - THEORIES OF UNDERDEVELOPMENT
APPENDIX B - CLASS AND THE PERIPHERAL STATE
APPENDIX C - THE STATE IN PERIPHERAL SOCIETY
APPENDIX D - WHY DO IMPORTERS JOIN ICA's
APPENDIX E - RURAL PROLETARIANISATION

BIBLIOGRAPHY
# TABLES AND FIGURES

| Table 1: | Estimated exportable production October-September 1975/76 to 1981/82 |
| Table 2: | Imports by importing members from all sources October-September 1975/76 to 1979/80 |
| Table 3: | Value of exports of coffee by exporting members entitled to a basic quota as a percentage of their total export earnings JANUARY-DECEMBER, 1975 to 1980 |
| Table 4: | Shares of United States green coffee imports 1977 to 1980 |
| Table 5: | Papua New Guinea: Coffee Exports |
| Table 6: | Papua New Guinea: Export Destinations |
| Table 7: | Papua New Guinea Coffee Exports: By Grade |
| Table 8: | Production of Coffee by Production Unit: 1955 to 1978 |
| Figure 1: | Structure of the Colonial Coffee Market in Papua New Guinea |
| Figure 2: | Papua New Guinea Coffee Exports and Value |
| Figure 3: | The Rise and Fall of Coffee Prices |
| Figure 4: | Structure of the Post-Colonial Coffee Market in Papua New Guinea |
| Figure 5: | Structure and Ownership of PNG Coffee Industry |
| Table 9: | Correspondence between average earnings in Rural Industries and the Rural Minimum Wage, 1959 to 1978 |
| Table 10: | Papua New Guinea - Monthly Coffee Exports - Value (FOB in kina of $A) |
| Table 11: | Change in ownership of coffee plantations |
| Table 12: | Average earnings in Rural Industries, 1959 to 1978 |
| Table 13: | Export Quota Allocations - 1981/82 |
| Table 14: | Export Shares 1976-1980 |
Table 15: Exporters Trading Margins - 1981 Y Grade
Table 16: Exporters Trading Margins - 1981 A Grade
Table 17: Non Member Market Margins Y Grade - 1981/82
Table 18: Tied and Untied Owned Factories Contract Analysis
Y Grade Contracts 1981-82 Price Series
Table 19: Factory Ownership and Production 1980/81
Table 20: Ration of Factory Door Price (Green Bean) to Export
Price (FOB, PNG)
Table 21: Coffee Prices to Growers and unit Values of exports
1980
Table 22: Purpose for use of DPI
Table 23: Use of 3 Services (all DPI Users) By Agricultural
activity
Table 24: Actual Tasks Undertaken by Extension Workers
Table 25: The Coffee Industry Board and Stabilisation Fund.
Deposits and Investments
Table 26: The 13 Steps
Figure 6: Procedural Chart
Table 27: Some results from In-Depth Questionnaire
Table 28: Coffee - Recovery Rates
The issues at stake may be stated clearly and briefly enough: they are the manner and extent of the development of capitalism so far, the nature of any obstacles in its path, the degree of its maturity, the prospects for its further development and its likely future course. Put thus baldly, our task possesses a certain stark simplicity. But it entails matters of formidable complexity which can be adequately addressed only on a basis of carefully posed theoretical formulations (which are likely to be contentious however scrupulous their posing) in conjunction with 'concrete analysis of a concrete situation (which, we recall was for Lenin, 'the living soul of Marxism' and which, if pursued seriously, is likely to be a task of awesome proportions). (Byres 1982:135-136)

Working out the concrete consequences for the 'field of action' in which classes, the state and external actors struggle to control economic resources is extremely complex and leads to some surprising discoveries. (Kasfir 1983:4)

In short, it is a matter of deciding upon an approach and adhering to it for both practical purposes (research constraints) and scientific reasons, for if all things are inexorably bound up (state-society), the only way of arriving at a scientific result is to circumscribe the subject under study, albeit allowing oneself the greatest possible leeway. (Poulantzas 1980:601)
INTRODUCTION

The critical study of development and underdevelopment has made little progress in the last ten years. The naive, but happy, period of the 1970’s, when the hegemony of dependency theory sought to establish the point that external factors have a crucial influence upon what is now called underdevelopment, is over. Dependency theory made its point but long ago it began crumbling under a barrage of criticism which asserted that internal factors are also important, that social formations have their own distinct internal histories and that one cannot possibly understand underdevelopment in the Third World unless one has a clear idea of the complexion of antagonistic social (class) forces and state control in a particular place. The critical study of development and underdevelopment has not responded well to this challenge. There is now a real danger that the critical study of development and underdevelopment will fall back on an emphasis on internal factors - as did the long discredited modernisation theory - and ignore external factors altogether.

The fragmentation and dissolution of the critical approach seems far advanced and there are currently a number of important positions within critical development theory. One position is held by a group who are still basically dependistas though their analysis (in response to criticism) has been stepped up to the level of world systems theory. Led initially by Wallerstein, the world systems theorists co-opted Gunder Frank at an early stage and have now taken on board a motley crew including Marxists (Amin 1976), behaviouralists (Chase-Dunn 1981), Weberians (Pettman 1979) and Smelser (1982) and Rosenau (1981). World systems theory is functionalist, hierarchical and static. It has no concept of class struggle and seems to have some peculiar ideas about historical materialism and capitalism itself. This may be the reason it appeals to orthodox scholars like Rosenau, who probably sees much in world systems theory that is familiar from his old international relations days.
A second position in this dialogue of the deaf is that of Althusserian articulation of modes of production taken up by Taylor (1979), Meillassoux (1972), Wolpe (1980) and, in the PNG context, Fitzpatrick (1980). These are generally functionalist and, while there are important differences between them, they would all agree that development is essentially an internal process which, in third world social formations, has been stymied by the fact that it has been in the interests of the capitalist mode of production to ensure the continued existence of the pre-capitalist or traditional mode of production. The latter is never clearly defined. These theorists have a clearer understanding of internal processes, but the political prescriptions that flow from their work are disturbing. Articulationists come close to the old dualists of modernisation theory for they must argue that development takes place when the remnants of the traditional mode are eliminated. Of course, from a Marxist viewpoint, there is nothing unorthodox about advocating the development of the productive forces but this development must be achieved, Lenin argued, under the hegemony of a worker-peasant alliance. It is difficult to imagine how the articulationists could accommodate within their framework this orthodox prescription for revolution in developing countries for in their scheme workers and peasants are the products of different modes. By the logic of their system the articulation of worker-peasant relations must be functional for capital as a whole and not a revolutionary alliance.

Bernstein and other have located the key problem in developing a third position to dependency and articulation of modes of production in the analytically difficult task of overcoming the internal/external dichotomy. Bernstein writes that there must be

an awareness of the need to transcend the more or less static dichotomy of 'internal' and 'external' factors shared by Warren and the dependency theorists despite their different conclusions. Within the framework of a theory of world economy the need to analyse any social formation in its specificity - as a complex ensemble of class relations and contradictions, of the economic, political and ideological conditions and forms of class struggle - is a political task of prime importance. (Bernstein 1982:231-232)
The thesis aims to show precisely how both internal and external factors are linked, reciprocal and mutually constitutive and how they define and shape each other. The starting point is a recognition of this link but one can proceed only by developing a sound analytical framework. This is Skocpol’s point when she argues that

instead of exclusively pursuing Wallerstein’s world system approach, we should investigate the world-historical emergence and development of capitalism in terms of hypotheses about variations in both 1) institutionalised class relations of production and exchange, and 2) patterns of state structures and interstate relationships, without simply reducing the latter to the former. To be sure, markets and patterns of trade are bound to be part of the picture, but it seems unlikely that they can be understood in their origin, functioning, or effects except with reference to changes in class and political structures. The alternative picture of world capitalism that is likely to emerge from historical analyses pursued along these lines will probably pertain to intersecting structures (e.g., class structures, trade networks, state structures and geopolitical systems) involving varying and autonomous logics and different, though overlapping, historical times, rather than a single, all-encompassing system that comes into being in one stage and then remains constant in its essential pattern until capitalism as a whole meets its demise. (Skocpol 1976:1087-1088)

Development theory must sooner or later attempt to deal with these ‘intersecting structures’ (e.g., class structures, trade networks, state structures and geopolitical systems) involving varying and autonomous logics and different, though overlapping, historical times (Skocpol 1976:1087-1088). There is a need to know the precise theoretical and empirical relationship between these concepts, what classes benefit from the intersection, to what extent imperialism shapes the periphery, what the implications of this shaping for development are, how the state functions and what form it takes in the periphery. This is the aim of the thesis. Chapter One shows that the principal effect of imperialism is that it disarticulates peripheral economies. Politically, however, imperialism has an indeterminant effect on the periphery. Thus while imperialism does retard the development of the productive forces in certain industries it does not determine the form politics takes or the class struggle
in the periphery. The peripheral state plays the role of 'midwife' to international capital in the periphery. Also in the first chapter some general tools of class analysis, class location and class relations, are refined. It is argued that the agrarian transition, as outlined by Bernstein (1977), is the main class problem to be faced in the periphery. It is shown that classes are located in production, they achieve dominance through market or exchange relations and, in the periphery, the class structure is complicated beyond the two class schema. It is further argued that the state in the periphery is a differentiated state. The state can take a different form and function depending on imperialism and the class struggle in a sector or industry.

In the second part of the thesis the theory is tested with evidence drawn from a study of the global coffee industry and the domestic coffee industry in one small coffee producing country, Papua New Guinea. Chapter Two shows that the International Coffee Agreement (ICA) has received support from importers and exporters because: a) it has reinforced existing trading patterns to the advantage of big importers such as the USA and big exporters such as Brazil and to the detriment of small producers like Papua New Guinea; b) it has not undermined state sovereignty or determined class struggle in domestic coffee industries. The success of the ICA also depends on the 'midwife' role of member states because only states can 'police' the flow of coffee as it crosses state borders.

The domestic coffee industry of Papua New Guinea is the subject of Chapters Three and Four. Chapter Three, on the colonial coffee industry in Papua New Guinea, identifies the two dominant forms of production in the coffee industry, those of planters and smallholders, and shows that both have limits of accumulation and experience difficulties in making the agrarian transition. The chapter also shows how class relations in the industry, in particular the vertical integration of white planters in the coffee marketing chain, has discriminated against the small producer. The colonial state in Papua New Guinea was a
Bonapartist state. In the colonial coffee industry this meant the state had a limited role to play in the development of the industry.

Chapter Four, on the post-colonial coffee industry, shows that while independence creates some new class forces (a black petty bourgeoisie and big peasantry) and new political actors (petty bourgeois nationalists and technocrats) the coffee industry has remained virtually unchanged in the post-colonial period. The post-independence technical structures in the industry, in particular the stabilisation fund and the coffee industry board are, like the Bonapartist state, transcendent over all classes in the coffee industry. As such they stymie the development of the dominant classes and appropriate surplus from the subordinate classes.

In conclusion, the thesis demonstrates that development and underdevelopment in the coffee industry of Papua New Guinea is based, without exception, on the exploitation of the smallholder.
The fragmentation and dissolution of critical development theory into two separate approaches each with a different focus, dependency and world systems theory which focus on external factors and articulation of modes of production which focuses on internal factors, has created an urgent need for critical theoretical and empirical work to develop a synthesis of existing approaches. This is not easily achieved. Some new, and contentious, theoretical formulations will have to be developed in conjunction with a 'concrete analysis of a concrete situation' (Byres 1982:135-136) if progress toward a third, critical development theory is to be made. This third position has as yet no heroes, no essentialist concepts, nothing that even resembles paradigmatic form. However, a comparison of the similarities and differences between it’s moods and feelings and existing critical development theory can begin an outline in general terms of a third, critical approach to the study of development and underdevelopment.

Some early works of this emerging third position have been labelled post-dependency work by Peter Evans (1985). These include books by Becker (1983) and Hamilton (1982). Bagchi (1982) and Mars (1981) in a limited way are also moving toward a new paradigm. None of these works deal in great detail with the problem of the peasantry. However, all would agree that the starting point of a third position is a more orthodox Marxism than that to be found in articulation theories, a Marxism which is to be coupled with some of the valuable lessons of the original dependistas to begin the outline of a new theory of development. The third approach is unlike that of dependency in that it takes more seriously the centrality of state and class. But it is like the early dependency writings, and unlike world systems theory in that it is primarily concerned with theorising the impact of the world economy on particular social formations rather than the dynamics of the system as a whole. It does not
concern itself with the world economy as a system because it posits much less systemic coherence in the world economy than does world systems theory. It is like articulation theories in that it tries to uncover the distinctive materialist nature of third world social formations, but it is unlike articulation and like early dependency theories in assuming that capitalism has altered all material social relations in peripheral societies. In this view, notions of a traditional or pre-capitalist mode of production are entirely fanciful, though it is recognised that much production of commodities for sale in the world market takes place at the household level.

It is fundamental to the third position that development and underdevelopment cannot be understood simply as the result solely of internal or external factors. Rather, development and underdevelopment are caused by a complex interweaving of external and internal factors. For analytical purposes, in both theory and practice, this interweaving occurs at a point at which imperialism, class and state intersect. The third view recognises that underdevelopment has been caused in many peripheral social formations by imperialism but it considers external influences to be only one level of the complex process of development and underdevelopment and it is not prepared to state that underdevelopment must always be the outcome of external intervention. Rather, the third view asserts that the form and type of international capital which enters the periphery must be analysed in its particularity and in the context of the history and structure of the peripheral social formation itself. One crucial outcome of the entry of international capital into the periphery, which the third view does regard as fundamental, is that the structuring of peripheral economies around the production and export of unprocessed primary commodities during the colonial period has made households vulnerable to changes in the world economy. However, the advent of external trading capital has left the household at an intermediate stage, short of full proletarianisation. Peasant commodity production at household level is a new form of production in which commodity production has entered the household reproduction cycle but which has not, at the same time, become directly vulnerable to exploitation by internal and external dominant classes.
This simple fact has created a myriad of complex class and state patterns and structures in the third world. The most general outcome of external structuring and peasant household production is the fragmentation and weakening of resident capital and national dominant classes in third world social formations. Their development is retarded by three main factors. First, their linkages to the world economy limit their accumulation usually by unequal exchange but sometimes by international regulation, as we will see in the case of coffee. Second, their own patterns of production are usually restricted to production in industries (such as crops for export) where it is only possible to appropriate absolute surplus value (increasing profit by lengthening the working day or devalorising labour) and not relative surplus value (increasing profit by increasing the intensity or the productivity of labour). Third, the survival of households as production units and the difficulty of extracting land and labour from them and the impossibility of directly appropriating surplus value from them limits exploitation of those engaged in household production.

These three factors weaken and fragment resident capitals and dominant classes and impose significant limits on the self-expansion of resident capitals. This has the most profound implications for the whole social formation. For one thing, accumulation is a much more political process because in such circumstances capital cannot rely on its own impetus to expand. The state therefore becomes of central importance in development and underdevelopment. The state is important because it sets the framework for accumulation. It is also important because it adjusts patterns of production, market relations public political and economic institutions to the changing demands of class forces as they struggle against one another and against the limits imposed by retarded development. The state in the third world takes a complex form; it is a hydra-headed monster ever-changing or never-changing depending on whether the class struggle requires it to be an instrument in the hands of the dominant classes, a Bonapartist state, transcendent above all the fractions of capital, or a partisan state soaking up surplus to fill its own treasury coffers.
In order to bring some coherence into the moods and feelings of this third position it is necessary to begin at the level of theory. This is the task undertaken in the first sections of this chapter. Because the third position is new and theoretically fragmented and disparate it is necessary to start from first principles of theory, and to develop propositions which can later be tested empirically. The theoretical propositions which are presented below are a summarised version of a larger, more detailed theoretical elaboration of the 'dialectic of underdevelopment'. For those interested in theory the complete framework has been reproduced as Appendix A, B and C.

**IMPERIALISM**

Imperialism is one of the most confused words in radical discourse both at a political and a theoretical level. The term is one of the most powerful tools in the vocabulary of Third World political actors partly because of its theoretical cloudiness. External actors can be labelled imperialists without clarification or qualification as to what is really meant. Third World academics also frequently use the term in its polemical sense in scholarly articles. This use of the term will be avoided here. In theoretical discourse the term is confused not only because of the many different versions of imperialism that are offered up as Marxist, but because the focus of this theorising and its purpose are very different.

Earlier theories of imperialism by Lenin, Luxemburg, Bukharin, were more concerned with the dynamics in the centre which caused a linkage between the centre and the periphery. However, changes in the post-war period caused a shift in the focus of studies of imperialism (Bernstein 1982:218) toward the effects of imperialism on Third World social formations and away from the dynamics of centre capital expansion. The theorists mainly responsible for this shift were the varied diverse views of those known as the dependency school or dependistas (see Chilcote 1981 for a detailed review of the range of dependency writers).
Dependency theorists argued that development in the periphery depended upon the patterns of dominance and dependence among the nations of the capitalist world. External economic factors largely determined the possibility or otherwise of development. As Dos Santos put the argument in its most general form,

by dependence we mean a situation in which the economy of certain countries is conditioned by the development and expansion of another economy ... The relation of interdependence between two or more economies, ... assumes the form of dependence when some countries ... can expand and can be self-sustaining, while other countries ... can do this only as a reflection of that expansion, which can have either a positive or negative effect on their immediate development. (Dos Santos 1970:231)

The analysis was relational: change was understood as being explained in terms of the relations between the centre and the periphery, relations of domination and dependence which were established historically through colonialism or patterns of trade. Dependency analysts generally focus upon the problem of foreign penetration of the peripheral economy. They attempt to show how external economic and political forces affect development in the periphery and how these external factors reinforce dominant classes in the periphery which in turn exploit subordinate classes.

Frank (1969) was the most influential of the early dependency theorists. Frank argued that industrialisation could not take place in the periphery because the periphery had been incorporated into the world market. The relationship between centre (or metropolis in Frank's terms) and periphery (or satellite) assumes the form of development in the centre and underdevelopment in the periphery because the centre exploits the periphery by appropriating its surplus (Frank 1969:33). The basis for this underdevelopment, Frank argued, was the manner by which surplus was appropriated from the Third World via a chain of metropolis-satellite relations connecting all parts of the world system from the metropolitan centre in Europe or the United States to the rural areas in the peripheral countries.1
The metropolis-satellite chain of exploitation lies at the heart of dependency proper for this is the mechanism that is responsible for the 'sucking out' of surplus from periphery to centre, the mechanism which accounts for the global expansion of capital and which structures world political domination of the centre over periphery. Frank's metropolis-satellite chain of exploitation is established in the colonial period and remains unaltered by decolonisation. Thus the fact of political independence makes no difference to the satellite countries for it has not altered the fundamental economic relationships constituted in the earlier (colonial) period of imperialism. Nor does the role of the state change after independence for it operates as the instrument of international capital as it always did, though it now takes upon itself the trappings of neo-colonialism.

Frank argued that all capital from the centre comes into the periphery in the form of monopoly, whether it be monopoly capital or mercantile capital. But this would seem to be an error. This error is partly caused by the inadequacy of his definition. As Frank uses the term, it means capital that is large scale, that uses advanced techniques and that usually introduces capitalist social relations. There are ambiguities, as in the case of agricultural corporations, but even in this case Frank could establish that such corporations have a monopoly over the distribution of the surplus. However, the more usual definition of monopoly, requiring barriers to entry from outside through a form of closure against competitors, suggests doubts that all capital entering the periphery from outside can be considered monopoly capital. Empirically this seems clearly to be the case. On the one hand international capitalism has changed since 1945 in that the rise of international organisations has facilitated the international circulation of a great deal of state capital. On the other hand, competitive capital also circulates internationally. In Papua New Guinea, for example, many enterprises have functioned largely as branch offices for small Australian capital. Further the situation in recent years in PNG has been that this small overseas capital has come into competition with local capital, since it is small. This overseas
capital is driven to the periphery not as a result of changes in the centre’s accumulation process but simply in pursuit of profit. It is centre, competitive capital, now overseas, entering a competitive capital sector in the periphery which best explains the role of this small capital in peripheral development. Competitive capital of this type has two levels. One (like monopoly capital) is the distribution of surplus between centre and periphery. The other is the more obvious level between worker and capitalist.

If competitive capitalism is still a feature of the periphery and if this sector can include overseas actors who enter as competitors, then Frank’s notion that monopoly capital is dominant throughout the social formation via distribution of the surplus through the hierarchical metropolis-satellite chain is also upset. This can be shown to be the case empirically also. If we take an industry like the coffee industry which, in the abstract, is a competitive capital industry because the barriers to entry at every level are not great, then we can see that the surplus can be sent overseas from the competitive capital sector. The surplus does not need to pass up through a chain whose pinnacle is a monopoly capitalist. Frank’s notion of the centre-periphery distribution of surplus is correct, but his argument that the periphery is united by a vertical chain is incorrect. The chain is linked horizontally between centre and sector or industry, and not vertically as unified by monopoly capitalism. Accordingly, the periphery is disarticulated (Amin *1976:238) by the heterogenous form and type of international capital and not unified by monopoly capital as Frank and others claim.

In the same way that international capital enters the periphery in different forms (monopoly capital or competitive capital) so it enters the periphery as different types of capital. International capital cannot be reduced to a single dominant type as Frank does by emphasising the role of multinational corporations, as Nabudere (1977) does in emphasising the role of finance capital, and as Emmanuel (1972) seems to do in his emphasis upon international trading capital. The type of capital
which enters the periphery also has effects upon the reproduction process of dependent social formations. In Tanzania, for example, the dominant type of international capital is financial capital—credit from the World Bank. Financial capital—credit is capital at the level of exchange which Marx rightly felt was a type of capital which plays a limited role in the reproduction of capitalism. It is limited because it may be more interested in a return on investment than accumulation through the reorganisation of production in the periphery on the basis of wage labour. The great importance of household production in competitive capital export industries throughout the Third World is, as Kay (1975) argues, a testimony to the limits of certain forms and types of capital in revolutionising the production process in the periphery.

Obviously different types and forms of international capital will have different effects upon each peripheral sector and industry so it is not possible to specify in general terms precisely how international capital draws linkages between centre and peripheral sectors and how historically a disarticulated social formation emerges in the periphery. This is an empirical question. However, merely positing the theory of a heterogeneous, uncoordinated process of international capital movements which has varying effects on the periphery does raise at least two major theoretical problems. The first is that heterogeneity of form and type of international capital makes problematic the site of exploitation. Is exploitation taking place primarily at the external level in terms of centre/periphery or is it internal to a social formation in terms of the capital/labour relations? So far, I have looked only at the question of imperialism and therefore mainly at arguments about the external sources of exploitation. However if, as a result of disarticulation, the effect of international capital on the periphery is largely indeterminate and if monopoly capital can not be considered to have a pervasive influence on centre/periphery relations then it seems to follow that the distribution of surplus between centre and periphery may not be the sole reason for exploitation. This is of course the case. It is necessary to acknowledge that while surplus distribution is
a major cause of inequality at the level of internal/external relations classes are not formed as a result of this distribution and that it is the capital/labour relation, the value form, inside the peripheral social formation that is the prime site of exploitation.

The second and related problem that arises as a result of an analysis resting on the heterogeneity of form and type of international capital is that the political determinacy that was present in Frank's work, i.e., exploitation of the periphery by the centre, is lost. This may not be a bad thing. It may ensure that the specificity of the political becomes an integral part of the study of imperialism rather than the political being axiomatic and therefore assumed as is usually the case. It is true that 'relations between economic activities and the state, and between these and inter-state relations, are crucial to any account of Imperialism' (Reynolds 1981:85) but the political determinancy in the theory of monopoly capitalism has caused a downgrading of the role of the political in the study of imperialism.

The role of the state at the international level is complex. On the one hand, the state contains within itself the promise of integration. It is the peripheral state through its allocative and interventionist roles which in the absence of integration by monopoly capital becomes the only social force capable of overcoming disarticulation. State appropriation of surplus in the periphery is massive and multi-faceted.

This appropriation can take numerous forms such as - the surplus being cooperatively produced and realised on the market. The state appropriates its share through taxes, etc. - the surplus being cooperatively produced and realised on the market. The state appropriates its share through taxes, etc. - the surplus being privately produced, realised by the state (state trading concerns) and distributed by the state - the surplus being produced in state concerns. The state is the direct 'producer' and appropriator, and it distributes the surplus. Other features of the state's economic role include: the shares of private, cooperative and state enterprise in the sectors of industry, the share of foreign capital, the share of the internally and externally realised surplus. (Ziemann and Lanzendorfer 1977:147)
Ziemann and Lanzendorfer add that these massive state interventions in production combined with the inflation of the state apparatus is often 'designed to maintain those means of production which do not produce themselves' (Ziemann and Lanzendorfer 1977:164). All forms and types of international capital which enter the periphery, as well as any local capital fortunate enough to capture parts of the state, come to depend on this maintenance function of the peripheral state.

However the promise of integration by the peripheral state cannot be fulfilled because the state is maintaining a disarticulated social formation. The nature of this maintenance function is circular for while it arises as a result of heterogeneity in form and type of international capital it is perpetuated, as Ziemann and Lanzendorfer (1977:164-80) show, by the social reality of a fragmented and unstable class structure and a relative social weakness of the dominant class in the periphery, itself a byproduct of the dependent and disarticulated reproduction process. This is the flexibility relationship between the state and economic development which Engels long ago observed (quoted in Mars 1981:102) and which concretely makes itself evident in the very general development plans and policies sponsored by peripheral states. It is this contradictory role of the state midway between integration and disarticulation, coupled with its strategic location in centre/periphery relations, that establishes the external role of the peripheral state as being that of midwife to international capital.

CLASS

Class must be understood according to the value form, i.e., classes are formed in production. In itself this suggests that an understanding of class must be internally based,
of the entire world system is reflected within the organisation and practices of individual nation-states. Hence, we need to understand class struggle as having a distinctly national form ... [It] requires that analysts work study of nation-states, while at the same time not losing sight of the relationship between that level and other levels. (Samoff 1982:122)

The utility of class for the purpose of overcoming the internal/external dichotomy is that, while the primary locus of class may be internal, 'it is precisely because class analysis can comprehend the mechanics of productive relationships that span national boundaries that makes it so valuable a method of analysis' (Nursey-Bray n.d.:45).

Samoff (1982) has attempted to rethink class from first principles with a view to analysing class in a way which includes both production and the organisation of power and allows the analytical framework to accommodate both internal and external levels. Of necessity the framework must be stated in general terms initially. Samoff writes

For use as an analytic construct, class must be understood as a relationship, in fact, two types of relationship simultaneously. On the one hand, class is defined by role in production, as production is organised at any particular moment. On the other hand, at the same time class is defined by opposition: classes exist only in opposition to other classes. That is, class is defined by both structure and process. Neither is adequate by itself. And both are, in historical terms, ephemeral. (Samoff 1982:112)

Samoff agrees with Wallerstein that 'classes do not have some permanent reality. Rather they are formed, they consolidate themselves, they disintegrate or disaggregate and they are re-formed. It is a process of constant movement, and the greatest barrier to understanding their action is reification.' (Wallerstein, quoted in Samoff 1982:112-113).

As a guide to research, Samoff's account is fairly abstract, so I take his notion of class structure (in production) and attempt to identify the precise nature of these structures, which I rename class location. Samoff's class process (in opposition) is also
not specific enough; it does not show how the state has a role in constituting class antagonism as well as a role in reinforcing the dominance of certain classes and subordinating the interests of other classes. To this end I also unpack this concept, renaming it class relations (subjective and objective). My unpacking of Samoff's guidelines for the study of class at the level of production relies on the conclusion of the previous section that, as a result of the fact that foreign capital enters the periphery in different form and type, accumulation in the periphery takes place wholly within disarticulated sectors.

The location of classes/fractions/social categories (class in itself) is established horizontally within sectors on traditional Marxist criteria. It is a reasonably simple matter of determining within a monopoly, competitive or state capital sector the range of classes generated by the ownership and control of the means of production. The outer limits of this range (i.e., in the private sectors the owners and non-owners) are not problematic, though rarely (if ever) is the range of classes/fractions/categories in any sector reduced to two polar opposites. An inquiry into the control of the means of production usually suggests the existence of intermediate categories and sometimes of fractions of the main classes. These are essentially what have elsewhere been referred to as contradictory class locations (Wright 1979). The theoretical significance of defining class location in this manner is that the rigour of Marx's concept of exploitation has been maintained (based on production in each sector), yet the differentiation of the social formation into sectors means that there can exist a larger number of classes without the analyst's feeling compelled to submerge them into a two-class structure.\textsuperscript{5}

However the identification of the amorphous locations of classes/fractions/categories tells us little about the organisation of power in a sector or industry. To know this it is necessary to look also at the relations (class for itself) between classes/fractions/categories. These relations can be formulated in two moments.\textsuperscript{6} The first is the class relation (objective) by which antagonism between contending
classes/fractions/categories within a sector takes the form of the objective siting of the boundaries between these classes, fractions and social categories. Class location (i.e., ownership and control of the means of production) translates into class relations (objective) or objective boundary siting between classes mainly through market relations in capitalist society. The market or state structured exchange relation will be the main content of class relations (objective). In the thesis the concept of 'pinch points' in the coffee marketing chain is developed to show how control and appropriation by dominant classes is exercised in the market. Pinch points are crucial class boundary markets defining the space occupied by various classes and representing prizes to be won or lost at the level of class relations (subjective). The input of the state is also important in establishing boundaries. Important also is the history of boundary siting within that sector and the ethnic and cultural limitations and the actions of the state vis-a-vis any class/fraction/category involved in these boundary struggles. The second moment of the class relation can be called class relation (subjective) and this is the real moment of class conflict and class struggle, for in these circumstances classes are acting subjectively to expand their space and hence to shift boundaries in their favour and therefore to roll back the space of other classes and fractions.

The subjective (self-maximising and expansionary) actions of classes/fractions/social categories (including state managers in the state capital sector) are actualised in two main ways: 1) by forging alliances with other classes/fractions/social categories in the sector, and 2) by developing a coherent ideological strength which gives them the edge in dominance over other class/fractions/social categories in the sector. We will return to these concerns and especially to the role of the state in influencing boundary siting and boundary shifting as well as outlining the circumstances in which the state itself can act in a subjective manner in the next section.

This general class framework can be used to study the peasantry in third world agricultural sectors by following Banaji (1977) and Bernstein (1977, 1979, 1981) who focus on agrarian transition
and the peasantry. Banaji (1977) insists that the mode of production should be conceptualised at the level of social formation. He makes a distinction between relations of exploitation of labour in individual enterprises and the relations of production and laws of motion of that mode. He argues that articulation theorists have confused these two for, if capitalism is the dominant mode at the level of the social formation, then all production relations in that social formation are in essence capitalist even if the relations of exploitation of labour in individual enterprises or branches of the economy appear to be pre-capitalist. Bernstein (1977, 1979, 1981) makes the same point: where capitalism is dominant then articulation of modes of production does not exist.

Bernstein (1977) bases his argument on the process of reproduction in which the peasant household is the unit of production rather than a mode or class. He argues that commoditisation destroys the natural economy (based on use values) for commoditisation causes the withdrawal of labour from use value production, thereby undermining the material reproduction of the natural economy. Rural producers, through the process of monetisation, are at the same time forced into commodity production, the production of exchange value either directly through wage labour or through the production of cash crops. The reproduction cycle of the natural economy is gradually broken by the consumption of commodities and at the same time the production of commodities (or wage labour, temporary or permanent) enters the household reproduction cycle.

The advantage of focusing on reproduction, as Banaji and Bernstein do, over articulation is that the process of commoditisation can be given precise meaning at the level at which agrarian commodities are produced, in the peasant household. There is no need in reproduction analysis to assume that the processes through which production and reproduction take place, including the means whereby peasants receive inputs in order to produce, the manner by which peasant production is directed and controlled by dominant classes (including
ideological precepts) and the role of the state throughout the 
production and reproduction process of the commodity, are 
functional for the social formation as a whole.

There is a difference between other approaches such as 
articulation of modes of production (see Appendix B) and that of 
Banaji and Bernstein as to whether peasant production should be 
regarded as a form of production subject to capitalist laws of 
motion (Banaji and Bernstein) or whether it should be regarded as 
a distinct mode of production (articulation theorists). The 
question is whether capitalism should be defined abstractly in 
terms of wage labour, in a way unrelated to the specific context 
in which it is to be applied, or whether abstract definitions 
should be made to fit, indeed should be drawn out of, empirical 
observations (out of the specificity of the peasantry in the 
Third World).

Bernstein's approach is specific to Third World peasantries 
(predominantly cash crop producers) and has the added advantages 
of retaining and synthesising previous views on agrarian 
transition and the peasantry. Bernstein has not neglected the 
great importance of the structural differences between the 
peasantry and dominant classes emphasised by articulation 
theorists. However he argues that the structural difference is 
not to be understood in terms of capitalists being engaged in the 
appropriation and realisation of surplus value and peasants being 
engaged in simple reproduction of simple commodity production, 
the object of which is to reproduce the producer and the unit of 
production, the household. Rather, peasants are engaged in 
capitalist commodity production, the object of which is also the 
realisation of surplus value, but with the important difference 
that the unit in which commodity production takes place is the 
peasant household. Bernstein has thus managed to retain Frank's 
original insight that capitalism has penetrated to every level of 
the peripheral social formation without losing the specificity of 
agrarian reproduction as Frank did. Bernstein writes,

The position taken is that peasants have to be located 
in the capitalist relations of production, but in 
conditions less determinate than those of the
proletariat to the degree that household production is not subject to complete expropriation nor to the particular modes of regulations and discipline of labour exercised within the capitalist production process. (Bernstein 1979:437)

His analysis allows us to think of all those who produce commodities for cash in the competitive capital sector as capitalists, even though production is based on a different form of exploitation of labour, the household.

Bernstein’s analysis also brings state and class relations to the fore of the analysis in a non-functionalist manner. The state is in focus initially because it is largely through state agencies that peasants receive payment for their crop. The price received by peasants is vital to Bernstein’s analysis for he regards this price as the wage labour equivalent. It is a price which can be kept low and to a minimum because it merely has to be equal to the cost of reproduction of the household’s labour power. The analysis is less functionalist even though the peasantry’s location in a capitalist mode of production makes it dependent upon the price it receives from the state and ultimately dependent on the state of the industry itself and world commodity prices, etc. But the fact that production takes place in the household where conditions are less determinant than those for the proletariat means appropriation of surplus by the dominant class is more problematic. Here again the state plays a key role for it is largely through the agencies of the state (state control of input, state marketing, state credit, state price setting mechanism, export and other taxes) that surplus is appropriated and it is largely these state agencies which peasants attempt to resist.

My task in this thesis is not to prove or develop Bernstein’s analysis but, by building on the base of Bernstein’s work, to draw out the political processes which shape state/dominant class/peasant relations in the coffee industry in Papua New Guinea. Bernstein’s analysis provides the essential first step for locating classes in peripheral rural areas. To conclude this section, it can be repeated that the commendable feature of Bernstein’s analysis of class locations in the periphery is the
recognition that the class structure is complex, that the whole range of classes has to be theorised, but that antagonism and class struggle must be understood at the level of production.

The study of class location in the periphery is straightforward but there is no established way to analyse class relations, processes of domination, comparable to the analysis of class locations via the value form. However, it would seem to follow from what has already been shown that class relations are crucially affected by two major variables: (a) the nature of the linkage of a sector to the world market and (b) the role of the state. O'Donnell (1980) has shown how the linkage to the international market via the form and type of international capital affects the nature and role of the national bourgeoisie, if such a class exists at all.

O'Donnell begins with the observation that Third World countries become linked to the international market through a single product or a few products which at different historical moments become interesting to the centre. Each product at a given stage of internationally available technology entails specific requirements and consequences in terms of the organisation of production (and the relations of production) or extraction. Some products can be handled by establishing a tenuous relationship with the local society; perhaps only the means of transportation to the port, the port itself and a police force for the control of labour are provided locally. Others, on the contrary, like the example of coffee in Papua New Guinea outlined in Chapters 3 and 4, require a rather dense network of relationships with classes and groups.

Emphasis upon the historical moment is important not because the technology (productive forces) in the same industries in different social formations varies (it does not because capitalism which is based on competition between capitals requires all capitalists to adopt the highest level of technology in similar industries) but because changes in the relations of production can lag behind the development of the productive forces in a social formation. Under such circumstances
production relations in different social formations might lead the same product to be produced within slightly different sets of relations of production. This difference can be evident in the different means by which quite different class relations are constituted by the state in similar industries in different social formations, e.g., roles for marketing boards, policies on development, approaches to export licensing, etc.

However, these different sets of class relations constituted through the state do not arise merely in the post colonial period. On the contrary, class relations in an industry which are constituted by the state are first constituted by the colonial state. In different social formations in the same industries it is evident that the different class relations constituted by the colonial state can either be maintained or reconstituted through the post-colonial state. Thus the role of the colonial state and colonial policy toward an industry becomes crucial as much of the post-colonial politics in that industry is shaped by the way changes in post-colonial state policy affect the internal and external classes extant in that industry. The colonial form of state, the role of metropolitan classes under colonialism and the conflict between them (colonial bureaucracy vs. colonial settlers), the place of the country in the world market and the manner by which commodity production in colonial times entered the household reproduction cycle, displacing the natural economy, all become of great importance to the way classes in post-colonial social formations are constituted by the state.

Class is then the social topography that spans internal/external boundaries. Yet class has limited utility as the basis of a framework for understanding the intersection of imperialism, class and state. For a start, I have shown how it has been necessary to deconstruct class and classes to allow for the formation and class relations of a very large number of classes and fractions. The complexity and variation in class structure introduces a heterogeneity into the analysis which would be difficult to theorise (let alone test) on its own terms. Second, class action is to be understood not in terms of presumed
orientations (e.g., comprador, dependent, nationalist, populist) but in terms of contingent alliances formed in the heat of struggle, alliances which by definition have built into them their own dissolution. Were we to make class the focus of our theory building, then social action would be largely defined in terms of class alliances and class alliance dissolution. Such an approach leads to analysis at the level of truism as we find in Cardoso and Falleto (1979), for example. Third, classes do not exist as mere locations, i.e., as exploiting and exploited classes, but classes exist in a complex ensemble of class relations. The realm of class relations is not autonomous, for boundary siting as well as boundary shifting depend crucially on the state.

THE STATE

The state is important as it has itself an external and internal role and thus incorporates within itself a potential synthesis of these levels. The state also incorporates within itself the potential synthesis of the political and the economic. No economic realm exists apart from the state. International and internal flows of capital and other transactions are regulated and overseen by the state. The organisation of society, that is, classes in dominance as well as classes in resistance, is constituted through the state. The struggle is over control of the nation's accumulation process, embodied in domestic society and social practices which are constituted within and by the state (see Andrews 1982:149 for more on this). The question is, as Beckman so succinctly puts it,

What kind of state is this? Presumably it is a capitalist state, but how can we understand its pre-eminence, in the context of the development of capitalism? More specifically, how can we understand its role in the relationship between capitalist development locally and on a world scale? How does it structure the relation between domestic and international capital? State capital itself, how does it enter this relation? What are the consequences for accumulation and class formation? (Beckman 1982:38)

The conceptual framework of the state which I present in the remainder of this chapter attempts to remain on the terrain of dependency theory, for I argue that the principal effect of
international capital on the periphery is to create a disarticulated peripheral economy and polity. One result of this, as we have seen, is that monopoly capital does not necessarily unify the social formation and hence may have an indeterminate political effect on the peripheral social formation. For this reason, the state cannot be differentiated solely in terms of its institutional divisions, as Alavi (1972) does in his early work, nor solely in terms of class struggle, as Leys (1975) seems to suggest. Rather the task is to differentiate the state in a way that indicates the complex reality of a dependency condition and state/class relations at sectoral or industry level.

The solution is to follow Beckman (1982:50) and show how differentiation within the state is expressed in the form and function of the state at sectoral or industry level. I argue that the connection between dominant class power and state power is mediated through differentiated forms of the one state. The function of the differentiated state is an empirical question. Generalisation about the function of the differentiated state is not attempted for obvious reasons, but here I do generalise about the bases of a state's functioning. I develop the concepts of functional autonomy and political penetration to outline the bases upon which a differentiated state functions. I proceed by proposing an ideal form of the state and argue that the extent to which the capitalist state approaches its ideal form - liberal, partisan and Bonapartist at different sectoral levels - in turn allows for the possibility of functional autonomy within the state apparatus. This determines the degree to which the state facilitates penetration of international capital and other dominant classes down through the social formation. Penetration may or may not be functional for development, for this depends on the type and form of international capital present in the country, the class structure, and the intersection of international capital and class with the state.
The Form of the State

The social structure of a capitalist social formation is based on the production and exchange of commodities, that is on processes of material life, and it is a state’s role to protect this social structure. It is now a well accepted argument, first articulated by Marx, that capitalism left to its own devices would destroy the social formation. Those who accumulate capital can identify and pursue their narrow interests as capitalists, but in general they are not able to identify and maintain the conditions needed to reproduce the social order in its entirety in the face of changing circumstances (Block 1977). So what we will call the state’s allocative branches (the judicial, legislative and executive machinery of government at all levels in the social formation) emerge with the initial aim of securing the minimal conditions necessary for accumulation to take place, i.e., that accumulators have access to labour, protection of property, etc. In order to fulfill this very general function, to prevent disintegration or to maintain the existing unity of the structure, the state’s allocative apparatus has a unique but general feature. It has a monopoly over the means of coercion within the social formation. This is an important power but a difficult one to understand in terms of its impact upon the structure.

The exercise of coercion has an impact upon the unity of the social formation. But what precisely is this impact? It would not be tenable to propose that in the normal form of the capitalist state - not the authoritarian or fascist form - coercion is everywhere, in every industry directed toward every class/fraction/social category, and exercised in a consistent and uniform manner. To consider the exercise of coercion as uniform would be to ignore the reckless diversity of institutions within the normal form of the capitalist state and to assume that every time coercion is exercised through the state it is in the interests of the dominant class. This is an instrumentalist view of the capitalist state which is now severely discredited.
It is more reasonable to propose that there is a good deal of flexibility and variation in the exercise of coercion within the normal form of the capitalist state. This flexibility and variation in the exercise of coercion occurs from branch to branch of the state as well as in its effects upon social classes. This would seem to be especially true of peripheral states which are disarticulated at the level of production. In this category we can include normal (not fascist or authoritarian) peripheral capitalist states such as Papua New Guinea, Tanzania, Sri Lanka, India, and also many states such as Ghana and Indonesia which, though military-led, are not structured on fascist or authoritarian lines. In these states, it is clear that coercion is exercised differentially from one branch to another and in its effects on social classes. It is not uncommon, for example, for one branch of a state to impose coercive import controls on local businesses while at the same time supplying these same businesses with state contracts. Similarly, it is not uncommon for a state rigidly to control trade unions, wage levels, etc., but by doing so to protect and advance the conditions of individual workers. If the idea of flexible and varied coercion within the state is accepted, it remains to show how such a situation can be incorporated in the analysis of the normal capitalist state.

Poulantzas (1978) has attempted to analyse the normal capitalist state form in terms of its relative autonomy. Poulantzas uses the term relative autonomy to refer to the degree of institutional autonomy relative to the dominant classes in the capitalist state. The relatively autonomous state can act in the interests of the dominant class as a whole because it is autonomous from direct control by the dominant class. In this way it can establish a unity in the dominant class through the exercise of state power. The main idea behind this theory is that the normal capitalist state is a class state albeit one that does not always act in the immediate interests of the capitalist class. Thus the form of the normal capitalist state is integrative for capital in general. It is a state which incorporates and often coerces dominated classes into capitalism either through a hegemonic ideology or politically through the institutions, voting etc. of the capitalist state.
There is however, an inconsistency in the idea of relative autonomy. Stated simply, the argument that the form of state is at once flexible in the exercise of its coercive power, yet reproduces the class domination of the dominant class, makes the state instrumentalist in the long run and reduces class struggle to an irrelevance. Poulantzas tries to escape this dilemma by arguing that the integrative function is exercised socially through the power bloc and ideological hegemony and not through the state but this merely introduces a new level of abstraction. In all this theorising, Poulantzas is working with a whole, though institutionally divided, state. His analysis can accommodate changes in the form of state from one period to another but he never conceives of the possibility that differentiated forms of state could co-exist within the one capitalist state.

Thus Poulantzas does not extend the diversity he sees within the state’s coercive institutions to the quite logical argument that the normal form of the capitalist state actually contains within itself the possibility of a range of forms of state. The form of state is probably established more on the basis of patterns of accumulation, class structure and institutional complexion which may vary within a state than on the territorial and national boundaries of a country. The state’s form is thus established regionally in Poulantzas’ terms and not geographically. The unity of the capitalist state might also be established regionally. It would follow then that the role of the capitalist state is less the integration of classes around the logic of capital and more the disorganisation of dominated classes at the political level. In this way the disorganisation of opposition through the state forms the basis for domination and unity of dominant classes in the social formation. In such a state, where a range of differentiated forms of state may be possible, it becomes crucial to devise precise analytical tools for identifying differentiated forms of state within the one capitalist state.

It is not possible in this section to give a detailed account of the ways in which patterns of accumulation, class structure and institutional complexion can be grouped in sets which prefigure
particular forms of state. (This is done in Appendix C). For current purposes it is merely necessary to detail the range of possible state forms which could exist within the one normal capitalist state. Following Malecki (1980) we can propose at least three major forms of the capitalist state which might co-exist within the one normal capitalist state. The first is the liberal form of state. This will exist where dominant classes are secure and little more is required of the states institutions than to ensure, by administrative decree, that there exists a suitable rational-legal framework within which the stability of class relations and the regularity of capital accumulation can take place. The second is the partisan form of state. This will exist where state capital has to be protected from market imperatives by the states institutions. This is a crisis form of state beset from within by complex bureaucratic contradictions and from without by all classes formed in the still existing private sector. The third form of state, the Bonapartist state, is most the important for our purposes. This is a state which is transcendent above all classes, dominant and dominated, that form its productive base. This base of support varies depending on the class structure. It cannot be generalized that such a state is supported by the small peasantry (Marx 1973). All that can be said about such a state is that both the dominant and dominated classes mediated by this form of state show the strongest ideological resistance to close links with often in crisis, and physical coercion of all the classes/fractions/social categories mediated by this form of state is not uncommon.

State Constitution of Class Struggle

In the previous section, the concept of class was discussed in some detail and the concepts of class location and class relations (objective and subjective) were introduced. In that section it was shown that the state is a factor in boundary siting and boundary shifting at the level of class relations (subjective) by definition. While the state was shown to be important, the study of class relations was not related
specifically to the detailed framework presented so far in this chapter. Thus the implications for class relations of conceiving of state and social formation as based upon disarticulated sectors which have the potential to realise differentiated state forms was not clear. This will now be shown, particularly: 1) how the process of capital accumulation in symbiosis with the state’s allocative apparatus creates a class structure which is contained at sectoral level but nonetheless antagonistic; 2) how subjective action by all classes — there is no power bloc — takes place according to the state’s form through the process of alliance building and ideological development; and 3) how contradictions between state and class action manifest themselves in a sector or industry.

While the monopoly of coercion in the state’s allocative apparatus is important in establishing and maintaining the unity of the social formation, it becomes clear that the integration of a sector or industry is also crucially related to the process of capital accumulation itself. This is so because a sector or industry is structured on the symbiotic relationship between the form taken by the state’s allocative apparatus and the relations of production and exchange in society. Class relations (the site of class struggle) are affected equally by the form of state and by the relations of production. The fragile coexistence which exists between competing classes under normal circumstances is assured equally by the role of the state’s allocative apparatus and also by the fact that the process of accumulation in each sector has never generated merely two classes/fractions/social categories per sector. In all sectors and industries, not only are more than two classes/fractions/social categories generated but the symbiotic relationship of the class struggle to the state allocative apparatus has meant that the rationality of the capitalist state emerges out of a threesided relationship between state managers, and dominant and dominated classes. This political relationship in turn emerges out of a three-sided relationship generated by the accumulation process in which exploiting and exploited classes are themselves mediated by the generation of social categories or class fractions.
It is important to stress at this point that the existence of mediating fractions or social categories should not be considered as altering the basic antagonism which exists between exploiting and exploited classes in the accumulation process or between dominant and dominated classes at the level of class relations. This is easy to show at the level of accumulation, for antagonism is endemic to the capital/labour relation in that sellers of labour power have to struggle in order to sustain and improve the conditions under which labour is sold. This is the essential characteristic of labour. Conflict can of course take many diverse forms including absenteeism, sabotage, slowdown, and collective industrial action. The existence of a mediating social category or fraction in the accumulation process may diffuse but can never alter this basic antagonism. Of course, when we bring the form of the state's allocative apparatus into the equation we see that conflict between what are now dominant and dominated classes can be more overt in certain sectors or industries than in others. State managers and technocrats, as the mediating category in this case, may control mechanisms which defuse to some extent the overt conflict between these classes but again the basic antagonism is not altered.

The subjective (i.e., self-maximising and expansionary) actions of classes/fractions/social categories are actualised as we have seen in two main ways: 1) by forging alliances with other classes/fractions/social categories in the sector; and 2) by developing a coherent ideological strength which gives them the edge in dominance over other classes/fractions/social categories in the sector. Alliances within a sector or industry can be established in order both to influence boundary siting and also to shift boundaries in favour of one of the aligned classes/fractions/social categories where this shift does not affect the fortunes of the other aligned class/fraction/social category. In this alliance-building process there are a range of creative possibilities open to dominant classes in an industry. In the coffee industry of Papua New Guinea we will see how the dominant class in the colonial period aligned with different state managers and politicians in the metropolitan state depending on the issue and also attempted to set up an alliance.
with a sponsored middle peasantry. In the post-colonial period, a motley group of petty bourgeois politicians aligned with technocrats to establish technocratic structures in the coffee industry. In both cases of alliance building, ideology helped 'cement' the alliance. In the colonial examples the colonial ideology of white superiority was prominent, while in the post-colonial example the ideology of nationalism cemented the alliance.

Subjective action can also be facilitated by the creation of a binding ideology for a class, fraction or social category. The meaning of ideology which I adopt for the purposes of this framework is restricted to social practices which fulfill the following conditions: 1) that embodied within such a practice is a concealment of the causes, nature and consequences of that practice or some other practice; 2) that this concealment is in the interests of one or more of the dominant social forces within that society. In this usage, ideology is an interest-based philosophy of a social group around which the group can mobilise. It is necessary to mention at this point that the idea of a dominant ideology or hegemony suggests a level of ideological integration which is almost impossible to achieve and which in this model would be considered a conjunctural phenomenon, not a structural one (contra Poulantzas 1978). Ideological integration of this type, where dominant classes in all sectors are linked and where subordinate classes in all sectors and industries consent to existing patterns, does occur in times of acute conjunctural crisis (in times of national upheaval such as war and decolonisation) but this is rare.

Function of the State

It ought to be clear that the conceptual framework of the state outlined so far is primarily a structural one. The function of the state is more problematic. I agree with the critical sociologists that the state functions to prevent the disintegration of the social formation (Habermas 1979:180). However, it would be quite incorrect to attempt to be more specific on the function of the state without the analysis being
empirically grounded. This is so because, as I have shown, both the state’s allocative apparatus and the state capital sector operate in the context of classes, fractions and social categories struggling to maintain their material conditions of life. The state does not develop autonomously but in the context of class struggle. Thus we cannot be sure, as functionalist explanations of the state assume, that either the state allocative apparatus or the state capital sector will automatically develop its form or change its policy in response to the needs of the overarching capitalist structure. In fact, it is very likely that some aspects of the state may be dysfunctional to the system as a whole. This is why I suggest that a thorough study of the functions of the state can only be attempted empirically. What can be done, however, is to identify the channels through which the function of the state is exercised and provide some criteria for comparing state function across social formations.

The question of the state’s function is a question of the role of the state’s institutions. In asking questions about institutions we must apply to the ensemble of state institutions the same degree of heterogeneity and differentiation that we have already applied to the state’s role in the social formation as a whole. Frankel, talking of advanced social formations, notes that critical analysis has tended to neglect the study of the state institutions and to overstate the degree of homogeneity in these institutions.

The orthodox Marxist preoccupation with private capitalist production has tended to leave analysis of varying state structures, voting systems and statutory bodies to bourgeois political scientists. One does not have to be an American pluralist or ‘pressure group theorist’ in order to acknowledge that heterogeneity of state institutions so long neglected by Left-wing analysts. One of the traditions in radical analysis exemplifying this neglect is epitomised in America by C.W. Mills, and recently, in reference to the transnational corporate development of the EEC by Mandel and Poulantzas; it tends to treat legislatures and state institutions as bi-partisan rubber stamps for monopoly capital (despite the existence of ‘fractions’), thus ignoring the tremendous veto and countervailing power of non-monopoly capitalists and workers via local, regional
and national state administrators, politicians and organisations which espouse the latter's interest. (Frankel 1983:94).

This neglect of institutions has been even greater when dealing with the peripheral state. As O'Donnell notes, 'very little has been done in terms of comparative studies of the state apparatus in Third World countries, furthermore, to my knowledge, very few country studies have devoted specific attention to the subject' (O'Donnell 1980:717). It is only in Alavi's recent work (1982:291), Beckman's (1982) work and the present work that critique is beginning to focus on the impact of differentiation within the state upon the functions of the state.

It is necessary then to recognise that there exists a potential autonomy between functional institutions within the state apparatus - what will be called functional autonomy - and that this degree of functional autonomy vitally affects the chances of dominant classes in bringing the state to function in their interests. Alavi has expressed this clearly:

It is also of the utmost importance for all the dominant classes in the peripheral capitalist societies to be represented in the state apparatus and to press their demands, for which purpose they establish viable modes of class representation in the state. These take a variety of forms: political parties, independent class organisations, formal representation within the state apparatus on committees etc., as well as fractions within the state apparatus established by virtue of the class origins and/or class affiliation and commitments of members of the bureaucracy and the military (Alavi 1982:296).

Heterogeneity within the state is one aspect of the function of the state. Functional autonomy exists within the state apparatus. An analysis of functional autonomy will uncover the extent to which different classes, mainly dominant but sometimes subordinate classes, can gain representation in a branch of the state and use that branch or institution to make demands over and against other branches and institutions within the state apparatus.
The function of the state is also determined by what is sometimes called the strength of the state. The strength of the state or the political penetration of the state is a consideration of the extent to which the state as a whole can exercise control over the whole social formation. Political penetration uncovers a) the extent to which the political-administrative-juridical centre of the new state 1) establishes an effective and authoritative central presence throughout its geographical and sectoral peripheries, and 2) acquires a capacity for the extraction and mobilisation of resources to implement ...policies and pursue its goals,' (Coleman 1977:3) and b) the extent to which the centralised power of the state has made it possible for the dominant class (from the monopoly capital sector, usually) to register its demands throughout all branches and institutions within the state hierarchy and down through every sector and also into all pockets and corners of the entire social formation. These two aspects of political penetration follow because

the 'centre' in a new state is the locus of 'state power' exercised through the 'state apparatus' by the 'state bureaucracy' ultimately controlled and directed by a 'ruling group'. Thus, political penetration is that process by which the most influential and powerful actors - the penetrators - in the ruling group and state bureaucracy use state power and the state apparatus both to maximise state sovereignty and to pursue the ideal and material interests both of themselves and ideally of the society over which they exercise control. (Coleman 1977:8).

The relationship between functional autonomy and political penetration can be shown as follows:

<table>
<thead>
<tr>
<th>FUNCTIONAL AUTONOMY</th>
<th>POLITICAL PENETRATION</th>
<th>STATE FORM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LIBERAL</td>
</tr>
<tr>
<td>+</td>
<td>+</td>
<td>PARTISAN</td>
</tr>
<tr>
<td>+</td>
<td>-</td>
<td>BONAPARTIST</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ = HIGH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- = LOW</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The diagram represents the 'ideal' situation for 'dominant' classes mediated by a particular form of state. For example, the dominant class in a liberal state would prefer that it have a high level of penetration through the social formation and that there be a high degree of functional autonomy such that other classes in the social formation cannot capture the state to use (via nationalism for example) against the metropolitan bourgeoisie. The dominant class in a partisan state, the upper bureaucrats in the state enterprises, would prefer also to have a high degree of political penetration through the social formation but would prefer a very low degree of functional autonomy in the state. This is because the bureaucrats in state enterprise are constantly engaged in a struggle with the allocative bureaucrats and planners of the treasury and other branches. The bureaucrats in the state enterprises can better demand 'partisan' treatment if the state’s policy is planned in a unified manner and state allocation centralised. The dominant classes in a Bonapartist state would prefer little political penetration because they are not the dominant class throughout the social formation, they are the penetrated, not the penetrators. However, they would prefer a large degree of functional autonomy in the state for their best hope of advancement lies in the capturing and holding of branches and agencies in the state.

Legitimation crises are a crucial aspect of the function of the state and in their most critical form are the result of disruption in the system of functional autonomy coupled with a collapse of political penetration. It can occur that, despite the existence of the various forms of symbiotic relationship in each sector, the social formation begins to disintegrate. Disintegration is most immediately a crisis for the state’s allocative apparatus, for it is this apparatus which is specifically charged with preventing disintegration. Thus when disintegration begins to occur we most readily think of it as a crisis of legitimacy for the state. However, legitimacy crises differ in degrees and some crises can be so severe as to threaten an entire sector or industry. Such a crisis is acute for it calls into question not the management of the state’s allocative arrangements but the actual material basis upon which social life is organised.
A legitimacy crisis can take two main forms - conjunctural and structural (Offe 1981:127). The first is a legitimacy crisis which is caused by a conjunctural crisis of some kind. Conjunctural crisis can be very serious, as in the threat of war or the collapse of an established vertical alliance between certain classes which, though not crucial to the social formation as a whole, may become well established within the state's allocative apparatus. In both these cases what is at stake, however, is how effective state managers are at overcoming the crisis. The second is a more serious legitimacy crisis, for this is caused by a structural crisis of some kind. Structural crises can threaten the existence of the whole social formation for they occur when a sector or industry begins to disintegrate, threatening immediately all the classes/fractions/social categories in the industry. Dominant classes are endangered both by decline in accumulation and by inertia within the state's allocative apparatus. A structural legitimacy crisis creates the potential for an alliance between all the dominant or all the dominated classes with the aim of fundamentally altering the social relations of production. The structural legitimacy crisis thus creates the preconditions for a period of social revolution.

**Political Analysis and the State**

The nature of political activity occurring in a social formation with the above structural characteristics is determined by the manner in which the social structure and the class struggle are interrelated. To analyse this political activity it is necessary to identify the structural characteristics which determine both the degree of internal coherence possible within a class/fraction/social category and also the ability of the class/fraction/social category to form and maintain alliances. These structural characteristics are of two types. The first is that which is determined by the production process, that is, the productive forces, the relations of production and the contradiction between them. The accumulation process itself creates the preconditions upon which dominant classes are advantaged in terms of internal coherence and the ability to forge class alliances and by which dominated classes are retarded.
on both of these criteria. Each class/fraction/social category as generated at the level of production acts as a structural limit upon the expansion of other classes/fractions/social categories. The limit is a dynamic one in the sense that it is constantly altered in relation to the amount of surplus generated by the sector. The question to be considered here is the obvious one of how a class/fraction/social category is advantaged or disadvantaged by the ongoing process of accumulation. This is a question of the location of the class/fraction/social category.

The capacity of a class/fraction/social category is not however, determined by the production process alone. For the form taken by the state's allocative apparatus in relation to a particular sector will also determine the potential for cohesion and mobilisation structurally available to a class/fraction/social category; that is, the form taken by the state's allocative apparatus can advance or retard the limits imposed upon classes in the accumulation process. The managers of the state's allocative apparatus do not structurally favour the dominant class in each industry though in response to other structural imperatives this is often the effect of their activity. As the form taken by the state's allocative apparatus is important for both aspects of the class struggle (internal cohesion and outside alliance) it follows also that the precise nature of the institutions through which this form is exercised is also important to the outcome of class struggle.

While class is undoubtedly the most important cleavage the importance of the state's allocative institutions may operate to mask or conceal basic class struggle. Institutions can diffuse class struggle if they are constructed upon regional, race or other criteria and it is obvious that when this occurs alliances will need to bend to accommodate institutional structures if they are to be socially effective. In all this discussion of politics it must be continually borne in mind that there is an ultimate limit to alliances in that dominant and dominated classes can rarely align.
It is clear that the abstract interrogation of texts undertaken above is only a step along the way to theory building. Theory must be historically grounded if it is to forge new interpretations. Theory is a mere academic plaything if it does not provide a concrete analysis of a concrete situation. Here we come up against some epistemological confusion in development thinking. Is the abstract theoretical work above undertaken with the aim of developing a general theory of development and underdevelopment? In other words, am I trying to devise a theory which can be applied everywhere and anywhere in the periphery? The answer is no. From the perspective of a critical development theory, general theory has little or no meaning. Rather the task is, as Harvey writes

> to create frameworks for understanding, an elaborated conceptual apparatus with which to grasp the most significant relationships at work within the intricate dynamics of social transformation. (Harvey 1982:450-451)

There is in fact no other way but to settle on an approach or a framework for, as Poulantzas (1980) writes, because all things are inexorably bound up (State-Society) and for both practical and scientific reasons one must circumscribe the subject under study. Yet the essence of a critical development theory is the realisation that the application of theory to a concrete situation inevitably prompts a return and an adjustment to the original theory. The process is a dialectical one, one of shuffling back and forth between theory and the empirical world to forge newer and better interpretations. It is the use of this dialectical method throughout the thesis that justifies the label of critical development theory.

**METHODOLOGICAL PROBLEMS IN THE STUDY OF THIRD WORLD AGRICULTURE**

The empirical circumstances of the third world make it obvious that, if we are going to deal seriously with the problem of development, then our analysis should be applied to the concrete reality of life in the countryside, where most people live and where the bulk of the surplus is produced and exchanged. This is
the home of the 'awkward' class, the peasantry. Three recent publications, all on Africa and with no counterpart in the Pacific, open up the prospect of a critical political economy of third world agriculture. The books are Robert H. Bates, *Markets and States in Tropical Africa* (1981), Keith Hart, *The Political Economy of West African Agriculture* (1982) and Dianne Bolton, *Nationalisation - A Road to Socialism? The Case of Tanzania* (1985). All three attempt to deal with the economic and political processes in agriculture and the historical circumstances that shaped these processes. They move far beyond the economists' limited concern with short-run micro-economic efficiency which, as Ellis (1983) notes, is by 'default' the main approach to the study of agricultural marketing systems in the third world. Each book recognises that agricultural marketing systems are something more than a set of purely functional activities and that the object of interest in their study cannot be exclusively the minimisation of costs (Ellis 1983). Rather these books argue that state marketing boards in Africa are largely geared to extract from a mainly agricultural population a reliable income sufficient to support regimes' expenditure needs. Their focus is on state and social processes rather than micro-economic processes.

The three books attempt to deal with the role of the state and social structure but they all do this in a rather unsystematic and unsophisticated way. Hart's focus is upon state formation. He regards the maintenance of viable rule as problematic and sees the African state engaged in the struggle to assert its authority, as well as increase its revenue, in the African countryside. Bates tries to inject the political dimension into his analysis of agriculture by generalising about the groups in society which benefit or lose as a result of the operation of state marketing boards. He writes,

The agricultural policies of the nations of Africa confer benefits on highly concentrated and organised groupings. They spread costs over the masses of the unorganised. They have helped to evoke the self-interested assent of powerful interests to the formation of a new political order and have provoked little organised resistance. In this way, they have helped to generate a political equilibrium. But in the
longer run, the costs inflicted by these policies are being passed on to members of the policy-making coalition and the configurations that were once in equilibrium are now becoming politically unstable. (Bates 1981:129)

Dianne Bolton's book is focused on a single industry, the sisal industry in Tanzania. She attempts to provide a class analysis of state and social processes in that industry. In her conclusion, she endorses the view that the state largely intervenes in the sisal industry in a way that advances the interests of the powerful, or the 'governing class' as she calls it. Bolton sees nationalisation as a defensive radicalism which does not benefit workers and peasants in the industry. Further, and this may be her main contribution to the political economy of African agriculture, she emphasises the continuities between colonial and post-colonial Tanzania in the sisal industry, despite talk of socialism and the striking similarities between the nationalised and remaining private sisal plantations. But Bolton's class analysis is not highly developed or linked in a sophisticated way to state processes. All three books thus admirably attempt to deal with the politics of African agriculture but they do so by applying fairly simple models of state and social relations to the complex state and class patterns and structures in rural Africa.

Part of the problem is methodological as a comparison of Bates and Bolton make clear. Bates is a bold attempt at a broad analysis of agriculture throughout sub-Saharan Africa, including an analysis of interlocking food and export markets. It is probably because Bates paints on such a broad canvas that he makes simplistic political assessments. Bolton however provides a more rigorous treatment of state and social processes in African agriculture, mainly because her focus on a single industry allows her to analyse in detail state initiatives and class response. A single industry approach does overcome the level of generality in broad sectoral approaches and, at the present stage of theoretical development, is probably the only way to study the political economy of third world agriculture.
The method I propose to adopt in this thesis for this purpose can be called the 'commodity chain' approach. A commodity chain approach is no more complicated than the term suggests. The method is to

take an ultimate consumerable item and trace back the set of inputs that culminated in this item - the prior transformations, the raw materials, the transportation mechanisms, the labour inputs into each of the material processes, the food inputs into labour. This linked set of processes we call the commodity chain. (Hopkins and Wallerstein 1982:59-60)

The commodity chain approach offers at least three major advantages for the study of the political economy of a single industry. First, it is a historical approach. By studying the transformation of items through the various stages of production and exchange one is also studying the enduring structure of the industry. How have these processes of transformation changed over time, and why? Is the industry marked by continuities in production and exchange from the colonial to the post-colonial period, regardless of regime change or rhetoric? What has been the social impact of this process of transformation over time and how has the state intervened in the process of transformation in the industry?

Second, the commodity chain approach is simultaneously a study of production and exchange processes. The industry must be studied in its totality, from the input of raw material to the final, consumed product. Such a method brings state and class process into the analysis in a way that is consistent with the Marxist scheme for locating classes in production. In most agricultural industries this brings the focus sharply upon the major producers in the third world, the peasantry. The commodity chain approach ensures that markets are not treated as epiphenomenal. Clearly market processes do affect the fortunes of producers and are more easily manipulated by the powerful than are the production processes in peasant societies. In addition the commodity chain approach forces the analyst to deal in a subtle way with the role of the state because the analyst must deal with a particular marketing board in a single industry rather than marketing boards in general. Thus the simultaneous study of production and
exchange which the commodity chain approach demands also helps to analyse in a sophisticated way state and social processes in a single industry.

A final advantage in adopting the commodity chain approach for the study of the political economy of a single industry is that if the industry chosen is an export industry then the impact of the form and type of international capital in the industry is important also. Many agricultural industries in third world countries are export industries so the commodity chain ends with the first world consumer after international capital has played a role in transforming the item. The commodity chain approach is thus a methodology which enables the analyst to discover the intersection of imperialism, class and state.

WHY STUDY THE COFFEE INDUSTRY?

The single industry chosen for study is the coffee industry. Coffee is chosen because it is an important commodity both in world trade and in the domestic economies of many third world countries. Coffee is second only to crude oil as the most important internationally traded commodity in value. In 1984 it was reported that coffee had an annual turnover of about US$10 billion (South, October 1984). Coffee is not the world’s main agricultural crop - its total volume of production is less than that of wheat and rice - but its importance in world trade is due to the fact that almost all coffee is produced for export. Coffee is the main source of foreign exchange for some of the world’s poorest countries. In 1979 Uganda (98%), Burundi (92.8%), Rwanda (76.5%), Ethiopia (68.6%), El Salvador (63.6%) and Colombia (58.%) relied heavily on coffee for their total export earnings as did Guatemala (34.1%), Ivory Coast (31.1%), Tanzania (27.1%), Kenya (26.8%), Papua New Guinea (18.1%) and Brazil (15.3%) (Mwandha, Nicholls and Sargent 1985:12). The top world producers in 1981/82 were Brazil, with 21% of total world production, Colombia, 17%, and Ivory Coast, 8% (Mwandha, Nicholls and Sargent 1985:152-153). But even in countries which are small world producers, coffee provides a source of cash income for numerous smallholders in producing countries and jobs for many
others in trade and manufacture in the importing countries. It has been estimated that coffee provides employment for about 20 million people in 3-4 million enterprises in the seventy or eighty countries in which coffee is produced (Payer 1975:154). There are few commodities which are produced and exchanged which have such international and domestic importance.

Coffee is a classic export commodity. It is grown in some of the world's poorest countries and consumed in some of the world's richest countries. Those who grow coffee rarely drink it and those who drink it almost never grow it. Coffee has thus always been dependent on world trade for a market and much attention has been lavished on regulating its international trade. A study of the form and type of international coffee capital thus presents a classic case for testing some dependency propositions about the patterns of global trade. Is coffee discriminated against in world trade? Does it suffer from unequal exchange? Has regulation of international coffee trade through the long-surviving International Coffee Organisation (ICO) benefited small producers? These questions are taken up in Chapter 2.

A study of the coffee industry inside peripheral countries also sheds much light on general and historical state and class processes in coffee producing countries. In many countries colonialism provided the impetus for the establishment of coffee industries. Under different forms of colonialism different industry structures were established. However, in almost all cases, because coffee was a rich crop, it was invariably grown in highly productive areas on rich soils and in moderate climate. A study of coffee is then also a study of some of the most advanced capitalist areas in a country. In coffee-growing areas, capitalism usually developed most rapidly and along with it developed the processes of class formation. In these areas because of the surpluses generated by coffee the basis is laid for the establishment of more advanced economic activity, such as service industries, and for more complex forms of class struggle. It is also in advanced capitalist areas that the domestic capitalist state displays its most developed form.
A study of coffee also forces the analyst to deal with the complex problem of household commodity production. In most of the world, most coffee is produced in households on small plots of 1 to 2 acres and in rambling gardens with coffee interspersed with food crops. The process of production and exchange of coffee brings into focus peasant-state relations in the political economy of third world agriculture.

WHY STUDY PAPUA NEW GUINEA?

The country chosen for study is the small island state of Papua New Guinea. Papua New Guinea has a very small population, 3,123,000 in 1980. Its Gross National Product is $US1820 million. Its Gross National Product per capita is around $US620 which gave it a ranking of 89th in the world in 1978 (Taylor and Jodice 1983:111). Gross National Product per capita is not to be taken as an indicator of development progress as was done by early development economists. However, Gross National Product figures, or more properly Gross Domestic Product (GDP), disaggregated even in quantitative terms, can give a quite useful understanding of the way in which people live in certain countries and where and in what activities they work. In Papua New Guinea, for example, the percentage of Gross Domestic Product provided by agriculture is very high. With 30% of Gross Domestic Product accounted for by agriculture Papua New Guinea ranks 31st in the world (Taylor and Jodice 1983:217). The importance of agriculture in Papua New Guinea is much more evident when one looks at the percentage of the labour force in agriculture. In 1977, Papua New Guinea ranked equal 13th in the world on this measure with 84% of its labour force in agriculture. This was almost double the mean of all countries in 1977 (Taylor and Jodice 1983:208).

A number of conclusions follow from the importance of agriculture in Papua New Guinea. The first is that it is one of the least urbanised countries in the world, ranking 111th on urbanisation (Taylor and Jodice 1983:202). The second is that industry plays a very minor role in its economy. In 1985 manufacturing in Papua New Guinea provided about 10% of GDP and a similar share of
formal employment in the economy. Total employment in manufacturing was only 26,000 in 1983 (Goodman, Lepani, Morawetz 1985:9). In economies where industry is of little importance small-scale non-farm growth and employment usually takes place in two other main areas, the services sector and government. This is the case in Papua New Guinea. In 1974 service activities accounted for some 45% of Gross Domestic Product. Despite this growth service industries are not large employers and in Papua New Guinea services employed only 7% of the labour force in 1977 (Taylor and Jodice 1983:216). The government sector has grown in Papua New Guinea in the period since independence, government employment has increased and provision of government services has improved. Primary and secondary school enrolments as a percentage of the school age population is low, Papua New Guinea ranking 100th, with 37% of the school age population in school (Taylor and Jodice 1983:164), but the growth rate in enrolment has been steady and great improvements have been made in the number enrolled in higher education. Public health is another area where Papua New Guinea performs well, ranking 29th in the world (Taylor and Jodice 1983:31). All this suggests that any analysis of Papua New Guinea must focus on life in the countryside where most people live and work on small household production units or in rural towns engaged in service activities and government services.

Papua New Guinea is most interesting politically because it has been able to maintain a functioning competitive political system since independence in 1975. This is rare in the developing world. The transition to independence from Australia was achieved peacefully after some eighty years of colonial rule. Since 1975, Papua New Guinea has held two successful post-independence elections, in 1977 and 1982. Each was conducted by secret ballot and was based on free speech and multi-party competition. The parliament functions as a political cauldron where twice, in 1980 and 1985, governments have been defeated on the floor of the house. Each time the defeated Prime Minister, Michael Somare, leader of the independence party, Pangu, and father of the nation, has gone quietly into opposition. In Papua New Guinea, unlike some developing
countries, politics does matter because access to state institutions and policy influence is a reward for those who succeed in political competition. But is competition in the formal political institutions a major source of social change or is it a mere reflection of social change and competition that has occurred elsewhere?

At one level, political competition and political stability in post-colonial Papua New Guinea can be analysed in an orthodox policy-through-description approach (Ballard 1981). For a start Papua New Guinea has not attempted to drastically alter its inherited political or economic structures. The removal of colonial control required the new government to carry out a large number of technical alterations to the machinery of state, e.g., the setting up of a foreign affairs department, the establishment of a national currency and a central bank, policy development in a whole range of areas but most importantly in macro-economic policy, coordination of government functions through the establishment of the Budget Priorities Committee, localisation of the public service, etc. Apart from the establishment of provincial governments in its nineteen provinces, itself a response to threatened instability and fragmentation, no significant restructuring of state institutions has occurred in post-colonial Papua New Guinea.

The Papua New Guinea economy is highly dependent, and trade is heavily concentrated on four main export commodities, copper, coffee, copra and cocoa, all of which are subject to severe price fluctuations on the international market. With 73.9% of its GNP provided by trade Papua New Guinea ranks very high in the world on this indicator. Of those countries ranking higher most are either very small or oil and mineral exporting countries (Taylor and Jodice 1983:226). Trade dependence shaped the macro-economic policy adopted by Papua New Guinea in the 1970’s. The policy was known as the ‘hard kina’ strategy. It required the monetary authorities to maintain the value of the currency in order to ensure its international purchasing power. The strategy was based on the belief that above all else Papua New Guinea needed a stable income in the early years of independence and, as a new
country with a new currency, it had to exercise financial responsibility in order to establish itself in international financial markets. This could be achieved by using fiscal mechanisms such as stabilisation funds to smooth out the fluctuations in international prices and in the exchange rate.

Papua New Guinea was extremely fortunate that it had a steady inflow of aid and benefitted from an inflow of mineral rents from the giant Bouganville copper mine in the 1970’s although the adoption of the 'hard kina' strategy did have its costs. The strategy maintained an open economy and reinforced the division of labour within the country. It facilitated the import of processed and luxury items from Papua New Guinea’s developed country trading partners, Australia and Japan, and the export of unprocessed primary products. The strategy had a negative impact on the domestic economy in at least three ways. First, it did not encourage the restructuring of the economic base. Second, the fiscal and monetary mechanisms were not considered suitable mechanisms for the encouragement of industry, for example, and the basic premise of the strategy was that Papua New Guinea would remain a dependent country. And third, it discouraged government intervention in the domestic market and government ownership of the means of production except where, as in the case of large mineral resource projects, such ownership was vital for management of the nation’s finances. The 'hard kina' strategy may also have inhibited the rate of growth of Gross Domestic Product in Papua New Guinea in the period 1976-1983, which has increased only by 1.4% a year compared with an average for all developing countries of 2.6% a year (Goodman, Lepani, Morawetz 1985:35).

But the policy analysis-through-description fails as an explanation for social change in Papua New Guinea because of its generality. For example, many countries have not altered their inherited political or economic structures since independence but few have emerged with a competitive political system. Clearly, an explanation for this must be sought in a more detailed historical understanding of the state and social processes in the colonial period and in the period of transition or decolonisation.
Also, a study of the formal political structure and competitive elections explains little about the relationship between the centralising institutions, the decentralised institutions such as the provincial government departments and the statutory industry boards and stabilisation funds. Such an approach can not explain why different levels exist inside the state, what purpose such differentiation serves, and what effect differentiation in the state has in organising and disorganising dominant and subordinate classes. It can not explain how far it is possible for powerful social actors who are neither politicians or bureaucrats to gain representation inside the state. In short, the policy approach explains little about the form and function of the state or the social base which underlies it.

All these features of Papua New Guinea - political competition, differentiation in the state, private enterprise in a market economy, an open economy - make it an ideal case study for the analysis of capitalist development in the periphery. If capitalist development in the periphery is to occur along the lines of its own premises then it should occur in Papua New Guinea.

THE COFFEE INDUSTRY IN PAPUA NEW GUINEA

The coffee industry of Papua New Guinea is an industry of immense national and local importance. It is the nation's most important agricultural export crop and Papua New Guinea's second earner of foreign exchange after copper. In 1976, during the coffee boom, coffee earned for PNG K132.6m, some 25.6% of the country's export earnings. By 1980 this figure had fallen to K118.6m. Coffee is produced on large-scale European-style plantations averaging about one hundred acres and by smallholders whose average 450 trees are interspersed with subsistence gardens. Scope for accumulation in the coffee industry occurs not only at the level of production but also in roadside buying and dry processing and exporting - all activities which come under the jurisdiction of the Coffee Industry Board (formerly the Coffee Marketing Board).
The study of the coffee industry begins in Chapter 2 with a study of the flow of world coffee. Special emphasis is placed in this chapter on the role of the International Coffee Agreement (ICA). In Chapter 1 it is argued that the reason peripheral economies are disarticulated is that their sectors and industries are linked horizontally ‘into entities the centers of gravity of which lie in the centers of the capitalist world’ (Amin 1976:238). The purpose of Chapter 2 is to trace these horizontal linkages from the world coffee market back to the producer state. The first task is to identify the form and type of international coffee capital. It is shown that while coffee circulates internationally as a tradeable commodity, trading relations are not determined solely by price. In fact, it is shown that the circulation of world coffee is fairly tightly structured for trade takes place as much on the basis of taste as on price. It is the inflexible import/export patterns that accompany taste rather than rational-actor market criteria which determine the flow of coffee internationally.

International regulation of coffee through the International Coffee Organisation (ICO) not only complements but reinforces the already tightly structured circulation of coffee. This is achieved, it is argued, by the informal establishment under the ICA of sets of bilateral alliances made up of importers and exporters. These alliances can be ranked hierarchically according to the magnitude of world coffee which they control. The influence of the big importer/big exporter alliance of USA and Brazil is greater in the ICO than lesser strata such as European importers and African exporters of Robusta coffee. In stabilising existing patterns of trade international coffee regulation has the effect on small producing nations – those outside the major alliances such as Papua New Guinea – of underdeveloping their domestic coffee industries. The cooptation of the domestic producer state to police ICO quotas is the principal means by which this effect is put into practice. At this level, the domestic state plays a 'midwife' role to international coffee capital, delivering the international dominance of the bilateral oligopolists into the periphery and thereby contributing to the underdevelopment of its own coffee industry.
The politics of coffee in Papua New Guinea is analysed in Chapter 3 on the colonial coffee industry and in Chapter 4 on the post-colonial coffee industry through a study of the intersection of imperialism (form and type of international capital), class (class location and class relations) and state (form and function) as outlined in this chapter. Chapter 3 and 4 show concretely how limits, costs and incorporation which are imposed from outside directly affect the class structure and the role of the state in domestic coffee industries. Within these limits, it will be shown that much of the politics within a competitive capital industry takes the principal form of attempts by dominant classes to modify the level of competitiveness in the industry to enhance their own interests via assistance from and utilisation of the state.

The principal contradiction which imperialism imposes upon domestic coffee industries is that a way must be found - usually via the state - to balance the limits to expansion of coffee resulting from international factors with the need to develop the productive forces to enhance private accumulation and state revenues. The effects of imperialism upon the domestic coffee industry of PNG can be seen in the three major crises - triggered by international capital - which have beset the PNG domestic coffee industry: 1) 1966/67 when the squeeze on plantation capital caused in part by the fact the PNG's coffee exports were governed by the colonial clause in the 1962 International Coffee Agreement (ICA) resulted on the one hand in an attempt by foreign owners of PNG plantations to enlist support from the metropole and on the other hand in their determined support for a continuous ban by the colonial state on smallholder coffee development; 2) 1972–74 when low prices and uncertainty in the international industry due to breakdown of the 1968 agreement coupled with the coming of independence in PNG led to an exodus of expatriate plantation owners. The result was that the plantation segment of the industry came under almost total national ownership and control; 3) 1980/81 to the present when low prices and overproduction at the global level, added to the encouragement in the 1976 ICA to hold stocks, has caused a tremendous build-up of excess coffee. The result is a dilemma
for the Coffee Industry Board (CIB) of Papua New Guinea, for it must work out not only how to finance stocks, but also how to subsidise the industry through the return of the coffee bounty to the industry.

These crises have been the triggers for substantial changes in the class structure in the coffee industry. Yet external factors have not determined the nature of the domestic class struggle nor the role of the state in the coffee industry. Rather, the changing class/state relations in the industry are the outcome of a dialectic between international factors - the first part of the principal contradiction - and the system of social relations as it exists and has evolved historically - the second part of the principal contradiction. This suggests that development can be understood as the process by which class struggle and class conflict is constituted and reconstituted through the state. It is shown that in both the colonial and post-colonial coffee industry the state in the industry, (i.e., the Coffee Marketing Board (CMB) and the later Coffee Industry Board (CIB)), takes a Bonapartist form. The PNG Coffee Boards have functioned in no particular class interest but rather are transcendent over the dominant and subordinate classes in the industry. The similarity of the secondary contradiction that the state has to deal with in the coffee industry in both periods. In the colonial period the contradiction was racially based. This involved the state in devising ways to ensure settler plantation prosperity by restricting coffee expansion while, at the same time, not alienating the biggest or most influential local growers. In the post-colonial period the secondary contradiction for the state in the PNG coffee industry has been how to regulate the industry to allow for the development of the productive forces while maintaining a balance and thus not favouring either of the two competing dominant classes, the big peasantry and the petty bourgeoisie. The form the state has taken has meant that its constitution and reconstitution of class struggle has achieved that balance and has not allowed a single class to arise and dominate the industry.
A case study of a new 20 hectare Arabica coffee development in PNG shows precisely how the state constitutes and reconstitutes class struggle in its attempts to balance the interests of the petty bourgeoisie and the big peasantry. The Bonapartist form of state can be realised in this case precisely because there exists an extraordinary degree of functional autonomy in the state at this level - as shown in the 20 hectare case study - and also because there so far exist no state mechanisms such as monopoly state marketing or legalised private ownership of land whereby any dominant class could drive its political penetration deep into the competitive capital sector.

The coffee study is an example of how the theoretical framework of the thesis can be applied to the study of development and underdevelopment in one industry. The case explains in great detail how the coffee industry in Papua New Guinea has developed and why the industry remains underdeveloped. The case does not explain development in Papua New Guinea as a whole. No mention is made of the mining industry, for example, a monopoly capital sector industry very different from coffee and very important in Papua New Guinea. Copper mining is obviously linked to a distinctive form and type of international capital, it has its own class structure, it probably has a different form of the Papua New Guinea state in its sector and obviously has developed differently and has different reasons for its underdevelopment. However, given the formidable complexity that a study of the development of capitalism entails, a concrete analysis of the concrete circumstances of development in every important industry in a whole state would be a task of awesome proportions far beyond the scope of a thesis.
Endnotes

1. Frank explains it in the case of Chile:

The monopoly capitalist structure and the surplus expropriation/appropriation contradiction runs through the entire Chilean economy, past and present. Indeed, it is this exploitation relation which in chain-like fashion extends the capitalist link between the capitalist world and national metropolises to the regional centres (part of whose surplus they appropriate), and from these to local centres, and so on to large landowners or merchants who expropriate surplus from small peasants or tenants, and sometimes even from these latter to landless labourers exploited by them in turn. At each step along the way, the relatively few capitalists above exercise monopoly power over the many below, expropriating some or all of their economic surplus and, to the extent that they are not expropriated in turn by the still fewer above them, appropriating it for their own use. Thus at each point, the international, national, and local capitalist system generates economic development for the few and underdevelopment for the many. (Frank 1969:31-32)

2. Coffee can be, and is, grown and exported by foreigners in the periphery in direct competition with local capital.

3. This term is borrowed from Ziemann and Lanzendorfer (1977:164) though used here in a different way.

4. We must always remember the point made by that most astute Marxist observer, Harvey (1982:450) that the capital/labour relation is merely the starting point for critical analysis.

5. I have thus achieved analytically the position others such as Ougard (1982/3:397) have called for, namely that the class structure must be analysed in a more complex way in the periphery than in the centre, a result partly of the structural heterogeneity of peripheral economies. I do not however endorse the use of Althusserian language and concepts adopted by Ougaard.

6. The term 'moments' is not chosen lightly. It comes from mechanics and suggests an image of forces about a point which can be measured in their own right but nevertheless are
collapsed into one movement which causes rotation about the point. Two moments are chosen to study class in the periphery, for just as we have to differentiate the class structure to get close to the complex reality of peripheral society, so we have to differentiate the concept class to make it a useful analytical tool for such a study. Samoff makes the same point. He writes 'for understanding politics within a particular state over time, however, it is important to use class as a more differentiated concept'. (Samoff 1982:114)

7. The precise nature of the state's input at this point will be discussed in a later section.

8. The classification of the peasantry into 'big' (or rich) peasants, 'middle' peasants and 'poor' peasants was first developed by Lenin and Mao and has received its most recent restatement by Bernstein (1979:431). According to Bernstein, i) 'poor' peasants come to constitute a rural proletariat. Even though they have access to a small plot of land, they are unable to reproduce themselves through household production. The lack of enough land or other means of production or family labour forces the household to sell its labour power in order to reproduce itself. Access to a small plot does not make the household in essence peasants; it contributes to the household's subsistence, thus reducing the wage necessary.

ii) 'middle' peasants are able to reproduce themselves mainly through family labour and land. However, at critical periods in the agricultural cycle, they employ seasonal labour which is provided by 'poor' peasants in the same area or by migrants from other areas where commodity production is less developed and the pressures for simple reproduction are expressed in terms of a need for extra food and/or money.

iii) 'big' (or rich) peasants come to form a category of capitalist farmers. They are able to accumulate sufficient capital to invest in production through the purchase of
superior means of production and/or labour power and therefore maintain a cycle of extended reproduction. A big peasant may not only operate as a commercial farmer employing labour power, but also act as a local merchant and rent out small-scale processing units.

This classification, and Bernstein's analysis, is very helpful in understanding the social processes which occur in a very complex sector, such as the competitive capital sector. In the thesis, the coffee industry in Papua New Guinea is studied as an example of the competitive capital sector. It is shown that many of the political changes which occur in this sector in Papua New Guinea are the result of class relations occurring in the competitive capital sector between the petty bourgeoisie and the big peasantry. These relations are quite difficult to uncover due to the overlap between these classes which Bernstein has noted. In general terms he has noted that serious limitations are set on the emergence of big peasants as large scale capitalist farmers by the state and by international capital. He argues that because the circuits of commodity production in Africa are so backward, capital accumulated by big peasants often has to be reinvested in mercantile and transport activities, normally the province of the petty bourgeoisie, because these areas yield a better rate of return than agriculture. Big peasants, he adds, expend their cycle of reproduction by entering commerce, thereby squeezing between international capital and direct producers or by occupational 'straddling' whereby some household members acquired wage or salary employment in better paid positions such as teaching, government and commerce. In Papua New Guinea it will be shown that in the coffee industry the space between international capital and direct production is a small one and that coffee politics is about the struggle between these two classes to occupy this space. The use of the state to maintain or extend control of this space is crucial to the fortunes of both classes.
9. Cardoso and Faletto are guilty of this in my opinion for nothing they say about the internal/external problem of class analysis in the periphery goes beyond what is implied in the terms themselves. Consider, for example, the following,

We conceive the relationship between external and internal forces as forming a complex whole whose structured links are not based on mere external forms of exploitation and coercion, but are rooted in coincidences of interests between local dominant classes and international ones, and, on the other side, are challenged by local dominated groups and classes. (Cardoso and Faletto 1979:XVI)

10. See J. Urry (1981) for a detailed account of the inadequacy of functionalist explanations of the state.

11. Alavi writes that we might examine '... the state not as a homogeneous and monolithic entity but as a differentiated one, within which we may discover more than one locus of power.' (Alavi 1982:291)

12. The country is called Papua New Guinea in the thesis for convenience although in the postwar colonial period its official name was the Territory of Papua and New Guinea.
PART II - IMPERIALISM, CLASS AND STATE IN THE COFFEE INDUSTRY OF PAPUA NEW GUINEA

CHAPTER 2: THE TYPE AND FORM OF INTERNATIONAL COFFEE CAPITAL

Much of the blame for convincing people that international monetary issues are hopelessly complex rests with the discipline of economics. Economists have generally described international monetary arrangements as purely technical expedients to maximise certain collective goods. Yet it is quite obvious today that any set of international economic arrangements means that some collectivities (nations, classes) get more goods than others. The protestations of the economists have served both to obscure these inequalities and to justify them as natural and inevitable. To prove that an existing set of social institutions is natural and inevitable, the economists have been forced to develop a set of arguments that are rich in obscurantism and obfuscation. It is this set of arguments that has persuaded so many people that these matters are beyond their intellectual grasp. (Block 1977.ix)

Introduction

Coffee has always been dependent on world trade for a market and over the years certain countries have come to dominate the world trade in coffee. The largest market for any type of coffee - green bean or soluble (instant) - is in the United States. In 1979/80 with total world imports of green bean at 60.9 million bags - 'bag' = 60 kilograms or 132.276 lbs of green coffee - the United States imported 20.1 million bags, with West Germany next at 7.9 million and France following with 5.6 million bags (Table 2). The United States was also the largest importer of soluble coffee in 1976 for example it imported some 1.5 million bags (green bean equivalent) followed by Britain's 698,000 bags out of a world export total of 4.5 million bags in 1976. In the United States alone it was estimated in 1973 that coffee trade (dealing) and production (roasting and instant coffee manufacture) is worth $2 billion dollars and provides some 200,000 people with employment (Galloway 1973:355). Just as world trade in coffee imports is dominated by the United States so world trade in coffee exports is dominated by Brazil and Colombia (Table 1). Table 4 shows that Brazil and Colombia are the world's principal exporters not only because they are the world's largest producers...
but also because they dominate supply to the United States market. Together, Brazil and Colombia provide 38% of coffee imported into the United States. Indonesia, Mexico and El Salvador follow, each with a 7% share of the United States market (Table 4).

Coffee then is a commodity whose circulation in the world economy affects the lives of a great many people in both Developed Countries (DC’s) and Less Developed Countries (LDC’s), but almost since its inception the world coffee industry has been prone to the most severe fluctuations of price and supply. In recent decades supply and demand have been so out of phase as to cause at least three great crises in the world coffee market. In the 1930’s a combination of bumper crops and a world depression resulted in huge supplies on the market with a corresponding fall in prices. In the early 1950’s world coffee prices were high as coffee shortages and supply problems were affected by the Korean war, but by 1957/8 new areas of coffee were producing and thus large amounts of coffee were coming onto the world market. This caused a fall in world prices to the pre-1954 level and the industry again faced a crisis. In 1962 the International Coffee Organisation (ICO) was set up to manage world supply and demand through a system of export quotas and for nine years price and supply stability was maintained. However, towards the end of the 1960’s, problems of over-production again occurred leading producer nations to attempt to restrict supply outside the International Coffee Agreement (ICA). The agreement collapsed, the producers failed to control supply and by 1972 the world coffee industry was again facing a crisis of over-production. In 1975 the Black Frost of Brazil wiped out one-third of the world coffee crop. As a result coffee was in short supply for most of the late 1970’s. Exceedingly high prices resulted, such that by 1977 world coffee prices were six times what they had been 4 years earlier. A new ICA was negotiated in 1976 but it came into effect only in 1982 when the old problem of over-production was again beginning to affect the international market. The dominant trend in supply and demand throughout the century has been that of over-production with supply far exceeding world demand. Certainly in 1962, when the ICA was first negotiated, constant
over-production was the single most important feature of the world coffee market and the cause of the periodic crises that affected the industry.

The purpose of this Chapter is to analyse international coffee relations. In the chapter the three main theses outlined in Chapter 1 for the study of imperialism are tested in the context of the world coffee trade. The first thesis is that imperialism may have an overall political indeterminacy in its effect on peripheral social formations, principally because the form and type of international capital varies greatly. The second major thesis is that the actual effect of the form and type of international capital on the periphery could not be properly understood without making the peripheral state a key feature of the study of imperialism. The third major thesis is that the role of the peripheral state in relation to imperialism is as 'midwife' to the entry of international capital into the peripheral social formation. The identification of the precise type and form international capital takes in the world coffee industry is central to the testing of these theses. In what follows I present in summary an outline of the major findings of the chapter, before moving on to a detailed analysis of international coffee relations.

The starting point for the analysis is that while coffee circulates internationally as a tradeable commodity, trading relations are not determined solely by price. In fact, the circulation of world coffee is fairly tightly structured, for trade takes place as much on the basis of taste as on price. It is the inflexible import/export patterns that accompany taste rather than rational-actor market criteria which determine the flow of coffee internationally. Thus, while the type of international capital in the coffee industry is commercial capital, trading relations are highly structured by the particular nature of the commodity itself and by established patterns of taste. Orthodox economists' accounts and some radical accounts tend to focus less on the influence of taste on structuring world coffee flows and more on the assumption that because the type of international capital is commercial capital
then world coffee flows can be analysed in terms of market imperatives. These accounts assume that a functioning market is the most important aspect of world coffee flows. I attempt to modify this conception by arguing that market analysis of world coffee may be less useful than political analysis which recognises that patterns of trade respond less to changes in price and more to processes of political negotiation, coalition formation and exercise of authority by actors in the world coffee industry. Partly as a result of problems in the coffee industry such as disequilibrium between supply and demand, but also as a result of the need to formalise political relations in world coffee, coffee traders have adopted a distinctive institution. The International Coffee Agreement (ICA, established 1962) attempts through negotiation and the exercise of authority to regulate the flow of coffee. It is the regulation of the flow of the commodity (international capital in its political form) rather than monopoly control of the surplus (international capital in its monopoly form) which characterises the form international capital takes in world coffee.

International coffee relations even before the establishment of the ICA were based on authority relations. However it was not until 1962, when the United States, the world’s largest importer, joined the ICA, that these structured authority relations included importers. (Appendix D gives some theoretical reasons why importers join ICA’s). This produced a fundamental alteration to world coffee relations, an alteration which not only extended the scope of regulation to include almost all international coffee actors but which provided for the first time a formal political authority structure through which international coffee flows could be policed and international coffee relations could be managed.

International regulation of coffee not only complements but reinforces the already tightly structured circulation of coffee. This is achieved by the informal establishment under the ICA of sets of bilateral alliances made up of importers and exporters. These alliances can be ranked hierarchically according to the magnitude of world coffee which they control. The greater the magnitude the greater the influence exercised by one bilateral
alliance, e.g., the big importer/big exporter alliance of USA and Brazil, over lesser strata in the ICA, e.g., European importers and African exporters of Robusta coffee. Such a network of alliances cuts directly across the myth of the dominance of the importer/exporter cleavage which is formally embodied in the ICA. Such a network of alliances also cuts across the notion in dependency theory that overall there is a political determinacy in international trade, through the mechanism of unequal exchange, which pits centre against periphery.

The analysis of bilateral alliances in the ICA reveals a much more subtle form of exploitation at the international level than dependency has yet posited. For while there is an overall political indeterminacy in the effect of imperialism upon peripheral coffee industries in general, the analysis here shows that the effect of a regulated international coffee market upon small producing nations - those countries outside the major alliances such as Papua New Guinea - is the underdevelopment of their industries. Underdevelopment of small peripheral coffee industries occurs because the dominant alliances within the ICA aim to stabilise existing patterns of trade and thereby to maintain the influence of large importers and big exporters over world coffee trade and particularly over the small producing nations.

The exploitation of small coffee producing nations by dominant alliances is achieved partly through the formal mechanisms of the ICA, such as the quota system, price system, etc. and also through what can be called informal mechanisms. Informal mechanisms include the meaning attached to formal mechanisms such as the myth of the dominance of the importer/exporter cleavage and the fiction of formal equivalence between ICA members because they are all states. These informal mechanisms leave a political space in the workings of the agreement that is filled by the influence exercised by the dominant alliances acting in their own interests. The result is that the second major thesis on the effects of imperialism on the periphery is shown to be accurate. For while the first thesis proposed that there is an overall political indeterminacy in the effects of imperialism on the
periphery, the second thesis proposed that, despite this, international capital in its pursuit of profit establishes systems of alliances which contribute to underdevelopment in the periphery. In the case of world coffee the regulation of the flow of coffee imposes limits upon peripheral coffee production. These limits on the development of domestic coffee industries occur in at least two ways. First, the virtual freezing of trading relations in the interests of dominant bilateral strata ensures that the production possibilities, especially of small producers like Papua New Guinea are severely curtailed. Second, most of the indirect costs of operating an ICA, costs which have increased in the 1976 ICA as stocks must be held in producer countries, accrue to producer countries. Thus in the case of small coffee producing nations which are dependent on foreign exchange earnings from coffee, these limits are severe enough to contribute to their overall underdevelopment.

The peripheral state plays a crucially important role in the operation of the ICA and therefore in the maintenance of dominant bilateral alliances over the flow of world coffee. Two important qualities of the state are utilised to make the ICA work. The first is the fact that a state is a territorial entity which has a monopoly over the means of coercion within a social formation. This quality is used in the regulation of world coffee to police the quota system. The second quality of the state vital to the operation of the ICA is the fiction that all states have a degree of formal equality. This fiction plays a very important role in the process of negotiation which takes place within the ICA so as to mask the reality that negotiation is dominated by alliances of big importers and big exporters. It is in these two ways that the peripheral state’s ‘midwife’ role for international capital is concretely exercised in the coffee industry.
DISEQUILIBRIUM IN WORLD COFFEE

Market Failure and its Relation to the Type of International Coffee Capital

The type of international coffee capital is commercial capital, i.e., the buying and selling of coffee rather than its production. It is necessary to identify exactly what type of commercial capital is active in the world coffee trade and particularly to identify the extent to which the buying and selling of coffee is responsive solely to changes in price. To determine this it is necessary to look much more closely at the causes of supply-demand disequilibrium.

Economists begin their investigations of the causes of disequilibrium in world coffee with the assumption that, because the type of international capital in world coffee is commercial capital, it must be price responsive. They ask why it is that the price mechanism does not operate in the world coffee market as it is supposed to in all markets to cause producers to stop producing when prices are very low i.e., before the market has reached the crisis of over-production. This is a market failure type question which naturally generates a market failure type answer. Bilder (1963) argues that the main reason for market failure is the coffee cycle, the coffee price or production cycle or the cobweb cycle. The coffee cycle refers to the biological lag of four to five years between planting and production. Bilder argues that the coffee cycle affects decisions about planting and uprooting which are in many ways unrelated to current price levels. Geer (1971) argues that smallholders cannot respond to international price levels because state marketing branches intervene to distort the international price. Both writers assume that smallholder producers of coffee are in a position where response to price is socially possible.

In this section I survey the market failure arguments of Bilder (1963) and Geer (1971) and show that their explanation for coffee disequilibrium is only partially correct. I argue that it must also be noted that much trade in international coffee is not
always responsive to price, for international coffee trade is structured as much around taste and historical factors as it is around market factors. It is precisely these other factors, when added to the coffee cycle argument, which explain why international coffee trade with or without regulation does not function as a competitive international market.

Bilder (1963) tackles the question of disequilibrium in world coffee in the familiar way by arguing that the world coffee market is an exception due to certain inelasticities in supply and demand. Bilder regards the short-run inelasticities on the supply side to be caused when circumstances such as the Korean conflict bring rapid upward movements in demand and price, but rapid adjustment to meet this demand is precluded by the fact that coffee trees cannot be brought into production for a period of several years. Conversely, if demand and price fall because of such factors as an economic recession in a principal consuming country, producers cannot reduce production. Similarly on the demand side consumption of coffee is relatively stable, expanding or contracting only gradually in response to sharp changes in supply and price brought about by short-run factors such as variation in crops due to changes in weather (Bilder 1963:333).

The inelasticities on the supply side that Bilder alludes to are said to be caused by the coffee cycle. The coffee cycle arguments suggest that a rise in the world coffee price results in the planting of new (and possibly improved) coffee trees. However, the new trees do not mature rapidly: New plantings begin to bear in 2 to 4 years if seedlings are used, and in 4 to 5 years if plantings are from seeds. Substantial crops cannot be expected until, say, 5 to 8 years after a new plantation is established, with yields rising to a maximum after 10 to 15 years. So for at least 4 to 5 years after new planting has begun, prices are likely to continue high, thus inducing continuing new planting. Once a substantial number of young trees begin to bear fruit, supply for the market will greatly increase, and prices will begin to weaken. This discourages new planting and eventually brings it to an end. However, the market does not reach a new equilibrium there, at that point where net investment has ceased. Production goes on rising for some years as trees of a later vintage bear fruit and this forces the
price down further. Unfortunately, however, this fall in price has little immediate effect in choking off supply. (Streeten and Elson 1971:15-16)

In the long term, Bilder argues, inelasticities in supply and demand are caused by more general features. These general features include, on the supply side, the fact of comparative ease of entry into coffee cultivation because many areas are suited to its production and because high yield and returns possible for the successful grower per unit area of cultivation compare favourably with other tropical crops (Bilder 1963:334). On the demand side, Bilder sees long-term problems of inelasticity caused by the fact that, 'consumption has grown quite slowly (about three to three and one-half per cent per annum) principally as a function of normal population growth and the gradual development of new markets' (Bilder 1963:334).

There are some problems with this explanation as it stands. On the demand side evidence was building up by the late 1970's to show that consumption was perhaps more responsive to price than had first been thought. In almost all consuming countries (except West Germany where competition between traders kept prices low, and East Germany where prices had always been high), the consumer response to price increases was significant. In European countries the decline in consumption varied from a 5% fall in West European countries to a 20% fall in the USSR and a 30% fall in Portugal. In the United States, the world's largest market, due to what coffee men called the emotional response of the American housewife, consumption plummeted. Furthermore it was apparent, even before dips in consumption caused by high prices in 1977 were known, that consumption of coffee had been declining over the long term since 1962 (Calvert 1974:18). This is not to say that consumption trends refute Bilder's argument for there is no consensus on the significance of these trends but they do perhaps suggest need for modifying his assertion that consumption is not responsive to price.

On the supply side Bilder's argument has been challenged in an important work by Geer (1971). Geer agrees that coffee is an exception because of the lag in the production cycle but makes
the point that this argument still depends, after the lag is taken into account, on the further condition that the market is in a state of pure competition (Geer 1971:43). Geer’s starting point is that domestic markets in almost all coffee producing nations are not, and never have been, competitive ones because state marketing boards intervene to fix prices. Geer wants to argue that

the output of domestic farmers in more or less every coffee-producing country ...need not be a function of the world market price, but may depend on the domestic price policy of the single national marketing board, that is, the principles and methods of the single seller in deciding what output shall be produced in any one country. (Geer 1971:75)

To make this argument, Geer turns to an analysis of coffee in two areas of Brazil, Sao Paulo and Parana. Clearly if Geer can prove that these farmers were responding to the prices set by the Brazil marketing board then, because Brazilian coffee is so crucial to the world market, he can generalise that world production is crucially influenced by the action of Brazil’s domestic marketing board.

One problem Geer has in generalising about the international impact of the internal domestic policy of one oligopolist, Brazil, is that much of Brazil’s domestic production was held in stocks throughout the 1950’s and 1960’s and much of it did not enter the world market at all. But Geer argues that this is precisely why overproduction at world level did occur because Robustas, which are generally interchangeable with Brazil’s continued to be produced in order to take up the markets left vacant by Brazil’s withholding of stocks. The fact that prices were low did not stop Robusta production because Robusta production was subsidised and regulated by marketing boards in the African countries just as coffee was in Brazil (Geer 1971:135).

Geer has argued a plausible case for the fact that governmental marketing boards contribute to overproduction and that it is mainly due to these ‘oligopolies’ that the world price is unable to bring supply and demand into equilibrium. However, we need to
be aware of the limits of his analysis. In the first place, not all coffee producing countries have state marketing boards which set internal prices. In Papua New Guinea for example, the coffee board is merely a regulatory board so it could not be seen to have contributed to the fact that at current low world prices Papua New Guinea production continues to increase. In the second place, Geer's argument is established by way of the relatively sophisticated structure-in-production in Sao Paulo, his major case study. Geer does not have to enter the hidden abode of production in Sao Paulo in his analysis, for all he need show for the purposes of his argument is that Sao Paulo farmers actually do respond positively to changes in domestic price, but not world price, by switching to competitive crops and uprooting their coffee trees. However, it should be obvious that the mere fact that they do react this way means not only that they are wholly engaged in commodity production but also that the option of switching to a competitive cash crop is not dependent on state assistance or outlawed by the the state.

Bilder's analysis, like Geer's, is also built on simplistic assumptions about the range of choice open to third world peasants. This analysis, with its emphasis on the rationality of the peasant farmers, is a great advance on the notorious backward sloping supply curve argued by some economists,¹ but the rational peasant farmer argument fails to situate the peasant in his/her social location. The responses to price by peasant producers, as will be demonstrated in Chapter 3 must be assessed in terms of the reality of the need to reproduce the household where the cash crop is merely one aspect of a complex interdependent cycle of household production. In such circumstances alternative cash crops may not be available or viable if they displace labour from food growing activities, for example. Another important aspect of simple commodity production at household level is the dependence of the household on the state for assistance to switch cash crops which is necessary in Papua New Guinea. Also to be considered in an analysis of the 'rational' calculations a household might make is the household's vulnerability to the state. The household is vulnerable not only to attempts to appropriate surplus from the peasants by state tampering with
price, as Geer would argue, but it is also made vulnerable by a series of regulations which in some countries such as Tanzania restrict peasant options including even the prohibition of uprooting coffee trees.

**Taste and Political Factors**

The main commodity that circulates in international coffee trade is the green bean. There are four different varieties of green bean. It can be blended with different beans to produce an immense array of different tasting formulas and it can be processed in one of two main ways, into roasted or soluble coffee for consumption. The green bean which circulates in international trade is thus not an undifferentiated commodity. There are the milds or washed Arabicas which are either Colombian Milds – from Colombia, Kenya, Tanzania and the Other Milds – from other South American countries, Caribbean and Papua New Guinea. There are also the unwashed Arabicas which are mainly from Brazil and the Robustas which are grown mainly in Africa. The difference between the unwashed Arabicas principally from Brazil and the washed Arabicas is in the manner of processing. In Brazil ripe coffee cherries are initially processed to the parchment stage by spreading them in the sun so the outer flesh is dried to a crisp husk. This contrasts with the manner of processing almost everywhere else as with the washed Arabicas which is to pulp and ferment the cherry in vats of water so that the bulk of the outer flesh is removed before the beans are spread in the sun to dry to reach the parchment stage. Each method of processing the ripe cherry results in dried coffee beans that ultimately produce coffee beverages of different qualities. Brazilian beans processed in this way generally produce a bean which is neutral in taste and is used as the base bean when various types of beans are being blended. Brazils are used in both roasted and soluble coffee (Stuckart 1977:571). Brazil is thus important in the world coffee industry, not only because it is the world’s biggest producer but also because its beans can be used in most blends. The fact that Brazils are neutral in taste also means they have traditionally been lower priced than the fuller flavours of the Milds and especially of
the rich Colombian Milds. Robustas on the other hand are grown from a different variety of coffee trees from Milds and Brazils. Robusta is a much more vigorous tree which can grow in tropical areas of Africa as opposed to the sub-tropical conditions that suit the Arabica variety. Robusta coffee trees bear more heavily than Arabica though their bean has a much higher acid content, creating their very typical bitter taste (Geer 1971:49). Robustas have traditionally been the cheapest of the world’s coffees.

Thus green beans are in demand for reasons other than price. In particular, different varieties of green bean are in demand for taste reasons. These taste patterns may well have been established as a result of political rather than trading relations between coffee producing countries and coffee importing countries. It is a well known fact that consumers in the United States and several western European countries regard the mild flavour attributed to blends containing milds as superior to the blends of bitter taste in their choice of roasted (not soluble) coffee. In southern and northern Europe however, consumers prefer the stronger taste of the more bitter types of coffee. The establishment of such contrary tastes might seem to suggest fairly distinctive trading patterns with Robustas going mainly to Europe and Arabicas going mainly to USA. This is generally the case. Brazils have found their biggest market to be in the United States (Haarer 1962:457), the world’s largest consumer, because traditionally American consumers have favoured the less distinctive, mass-produced blends. This trade relationship has been the principal one influencing prices of coffee in world markets and it is the dominant one in trade in Arabicas. The New York Coffee and Sugar exchange continues to be the focal point in Arabica coffee trading. Robustas, from Africa, on the other hand are traded through the London terminal market for European consumption (Munnull and Densley n.d.:15).

Most Brazils still do go to the USA, most Robustas to Europe and a large proportion of Papua New Guinea coffee to Australia but the taste factor creates even more complex and more rigid
patterns of trade than sketched so far. This complexity stems from the simple reason that very few coffees have a suitable taste, or indeed are cheap enough, to be drunk by themselves,

here lies the reason for blending which seeks to create, by blending various coffees, a single one with a combination of delightful traits - a balanced composition of the best attributes of each. With the changing components which are the beans, the blender must maintain a standard of quality and consistency. Here lies the art of blending, for it is an art as much in the mass market as in the specialist trade, and the results are a closely guarded secret. Seven or eight coffees with complementary characteristics are generally chosen. Acidy, syrupy, and neutral varieties are combined in such a way that flavour, aroma, appearance and price are properly related to produce a smooth drink combining all the better qualities. (Roden 1977:53)

Hence the dominant trading patterns are cross-cut by even more subtle patterns created by the taste factor. Once a blend is established then it has an individual market to cater for and it must be assured of a continuous supply of all component beans which are required.

It is difficult to isolate causative factors in these dominant taste patterns though probably the geographical closeness of the USA and Brazil played a part in at least reinforcing these taste patterns. The colonial relationship based on tariff and exchange concessions, probably reinforces taste patterns between African producers and European consumers. Geer has shown how the European market in coffee has been hampered by the fact that France, England and Portugal assured their former dependent colonial countries market access through preferential tariffs (Geer 1971:67) which were often established in colonial times. A most-favoured-nation trading relationship in coffee was established between the Territory of Papua New Guinea and Australia in 1961 principally because the Territory was a colony of Australia.

Some buyers and sellers are locked into trading relations which have their origins more in taste and political factors such as the colonial relationships than in market determinants. Thus
factors other than simply economic ones, factors such as colonial history and politically mediated state action intrude to create the dominant trading patterns.

The International Coffee Agreement (ICA) as a Distinctive Form of International Capital

So far I have discussed only the type of international capital and not its form. The type of international capital refers to the manner (e.g., financial, commercial, industrial) in which capital changes hands at the international level. The 'form' of international capital refers to the degree of concentration of this capital and the effect concentration has on the flow of capital at the global level. The dominant type of international capital in world coffee is commercial capital but it is commercial capital which trades coffee in a way that is not solely determined by price. The effect of taste and political factors upon the flow of world coffee is great enough to suggest that the existence of commercial capital in international coffee relations should not be taken as evidence of a functioning competitive market in the flow of world coffee. The paradox of international coffee relations which has been so little understood, is that while the type of international coffee capital is commercial capital which is not competitive, the form of international capital is not monopoly capital or the market concentration of large firms but is structured around a set of authority relations or political alliances among big exporters and big importers.

Both orthodox economists' accounts and radical accounts tend to assume that the existence of commercial capital in world coffee means by definition that a pure competitive market for world coffee exists, buried beneath the mire of international coffee relations. They see their task as an archaeological one, uncovering and refurbishing the market by exposing the distortions in world coffee which keep the market buried. This is essentially what Geer did in his analysis of the role state marketing boards play in distorting the world price in developing countries. The main difference between orthodox and
radical accounts based on the type of international capital (commercial and therefore market structures) is that the former see the market as ultimately mutually beneficial if distortions are removed whereas the latter see the market, competitive or not, as shifting the terms of trade between centre and periphery in favour of the centre.

A recent document from UNCTAD entitled Marketing and Processing of Coffee: Areas for International Co-operation (1983) takes the same approach. It assumes a competitive (commercial) market and proceeds by exposing the obstacles that exist for producing countries, particularly the small ones, in entering the markets of major consumer countries.

These obstacles are due, first, to the degree of concentration of international traders, processing companies and distribution networks and, second, to the existence of trade barriers such as tariffs, quotas, discriminatory trade controls and consumption taxes. (UNCTAD 1983:47)

The report then goes on to mention areas in which producers and importers might co-operate to reduce anti-competitive behaviour and to co-operate and share in the provision of more information about coffee flows,³ to reduce discrimination on freight rates, to co-operate to improve the existing capacity of stockholding facilities, to make joint requests of international financing agencies that they provide for expansion of coffee processing facilities in small countries, etc.

Some radical accounts also tend to assume that the type of international capital is more important than its form and that the existence of commercial capital is evidence of a functioning market. Emmanuel's (1972) radical theory of unequal exchange has not, to my knowledge, been applied to the flows of world coffee. From his perspective it would be argued that the commercial type of international coffee capital is mobile, while labour in the coffee industry is not mobile from one state to another. Commercial capital can seek the highest profits whereas labour must accept the price which is given. Empirically it is clear that labour in the periphery is rewarded at a lower rate than in
the centre, so that the return to developing countries producing coffee, where intensive labour is poorly paid, is much less than that for the centre where labour is highly rewarded and where commercial capital repatriates global profits.

The archaeological 'dig' for the market by the radicals proceeds on the assumption that it is economic concentration, in the form of monopoly capital, that is causing the market to be non-competitive. Dinham and Hines (1983), for example, note that two giant transnationals (General Foods and Nestle) dominate both trade and processing in the West and go on to make a very convincing case that the major transnationals have made it very difficult for peripheral countries to build up their own coffee processing industry. Such analyses rest on the very real facts of market concentration in world coffee flow as noted by UNCTAD which estimated that 50 per cent of international trade is traded through international trading houses. Transnational corporations account for the greatest part of the remaining 50 per cent of world coffee trade. The international trade companies are also concentrated. In the United States, some 50 per cent of coffee imports is traded by ten trading houses. In connection with the concentration of the roasting industry, it is estimated that, in the major coffee-consuming countries, the four-firm roasted coffee sales concentration ratio was between 55 and 90 per cent in the late 1970's. In the same period, and for the same group of consuming countries, the four-firm soluble coffee sales concentration ratio was between 80 to 94 per cent. In the last two decades, the food distribution industry has also become increasingly large scale and concentrated. In the 1970's, for example, the four largest food distribution (grocery) firms' market share was in the neighbourhood of 50 per cent in the United States. It is estimated that the over-all gross margins of trading, processing and distributing companies represent approximately a quarter of the retail price of coffee. It is also estimated that approximately 50 per cent of the retail price of coffee is due to manufacturing and distribution value added. Developing countries could thus substantially increase their share of coffee retail price by processing coffee and marketing it internationally. (UNCTAD 1983:47)

Monopolies certainly exist and undoubtedly play a significant role in certain aspects of world coffee flows. However, if monopoly or market concentration is to be considered the key form
international coffee capital takes, it would seem necessary to argue that large corporations can exercise their monopoly power in areas other than mere processing. In particular monopoly power is generally taken to mean that multinational corporations can act to influence green bean prices and that they can exercise influence over where, how and in what quantities the commodity is produced. Further, it would seem logical that, if market concentration by large corporations is as significant as the aggregate figures of UNCTAD imply, then large corporations would be opposed to any interference with a market which they dominate. In other words, it would seem to follow from this analysis that large corporations with monopoly power would mobilise to oppose state intervention in the form of an international coffee agreement into the world flow of coffee.

In fact, none of these activities are engaged in by coffee transnational corporations. Far from being able to influence green bean prices, transnational coffee corporations probably suffer as badly from price fluctuations of green beans as do any other coffee actors. Transnational trading and processing companies find it necessary to stockhold in large quantities the whole range of green bean that might be required for a particular blend. This of course is due to the importance of taste in world coffee flows. The diversity of stockholdings makes it almost impossible for transnational corporations to focus their activity upon the manipulation of the price of any particular coffee variety. Should the price fall in any variety then transnational corporations stand to make large losses on their stockpiles. The inability for transnationals to control raw material price is very evident in their increasing turn to futures markets and in their general support for international regulation. Further, transnational corporations engaged in trading and processing cannot influence production decisions inside producing countries. Considering their market concentration in the importing countries, the major roasters, Nestle, General Foods, Proctor and Gamble and Consolidated Foods, have a very low level of vertical integration. Although the situation varies from company to company UNCTAD found '[w]ithin the roasted coffee industry the ... industry concentration measure increased from 28 per cent in
1960 to more than 32 per cent in 1978' (UNCTAD 1983:17). Transnational corporations could of course affect production decisions in developing countries without necessarily controlling production but the peculiarities of coffee trade, which include settled trading patterns and continuous overproduction, make it unlikely that Transnational corporations can exercise their power to restrict purchases and hence influence production decisions made in the periphery. Finally, very few transnational corporations opposed the establishment of the ICA. This would suggest there are significant limits to the dominance of transnational coffee corporations in world coffee flows and that regulation may have offered them benefits which did not flow automatically from market concentration.

While certainly the monopoly form of international coffee capital is effective in capturing a large slice of the value added to coffee through processing, the inability of large coffee corporations to influence price and production decisions suggests monopoly capital is not the major form which international capital takes in the industry. While co-operation of the type suggested by UNCTAD is clearly desirable and while the empirically correct fact of declining coffee terms of trade as emphasised in unequal exchange theory is a cause for concern, my argument is that none of these accounts based on the type of international capital which assume a competitive market go far enough. Nor do accounts which identify the major form of international capital in the coffee industry as monopoly capital provide an understanding of how decisions made at the point of production are influenced by and influence in turn international coffee relations. I argue rather that it is the distinctive form of international coffee capital, a form which for most of the period since 1962 has been a regulated form structured around a set of authority relations formalised by the International Coffee Agreement (ICA), which best helps us understand world coffee flows and their effect upon small peripheral coffee producing industries.
The failure of the market to bring world supply and demand into line meant that world coffee relations would have to be managed through direct intervention in the market by an authorised international body. Clearly, such a body must aim to accommodate existing patterns of coffee relations in its framework and go as far as possible to satisfy existing interests in its decision making. Could a body be created that dealt fairly with all participants?

The 1962 International Coffee Agreement was entered provisionally into force on July 1, 1963. It endorsed a list of objectives which set down the various interests which the agreement hoped to accommodate. The signatories to the agreement were the major importers and almost all producers for ‘...it obtained the acceptance of countries accounting for 97.4 per cent of world coffee exporters and 96 per cent of importers’ (Streeten and Elson 1971:20). The objectives stated in the agreement were:

1) to achieve a reasonable balance between supply and demand which will assure adequate supplies of coffee to consumers and markets for coffee producers at equitable prices;

2) to alleviate the serious hardship of burdensome surpluses and excessive fluctuations in the prices of coffee to the detriment of the interests of both producers and consumers;

3) to contribute to the development of production resources and to the promotion and maintenance of employment and income in the member countries;

4) and 5) to assist in increasing the purchasing power of coffee exporting countries by keeping prices at equitable level and to encourage the consumption of coffee by every possible means, and;

6) in general recognition of the relationship of the trade in coffee to the economic stability of markets for industrial products to further international co-operation in connection with world coffee problems. (International Coffee Agreement, 1962 Objectives)
The formal mechanisms of the various agreements appear, on the surface at least, to translate the stated commitment in the objectives of the agreements to neutrality and fairness into the form of the actual mechanisms. The mechanisms adopted appear to be non-discriminatory because they are based on objective criteria which seem to favour the producer countries:

1) the key regulatory tool is based on export quotas operating on supply and not on direct price manipulation. This is a paradox in the Agreement, for while stabilisation of price was perceived as the means by which supply and demand could be brought into line and equity achieved in the world coffee industry, the agreements themselves make no attempt to stabilise prices directly. They rely instead upon a comprehensive system of export quotas which would limit supplies put on the market by exporting members to estimated levels of demand. To administer the agreement, a new international institution - the International Coffee Organisation (ICO) - was created,

2) fairness is evident in the manner by which the ratio between the absolute (global) quota and the individual (country) quotas was worked out and adjusted though perhaps not in the manner by which producer country quotas were allocated in the first place,

3) the effect on price of quotas in the 1962 and 1968 Agreements was to put a floor on price (Pincus 1967:274) rather than a ceiling on it, suggesting a good deal of favouritism toward the producer countries,

4) and the lack of controls on production in the producer countries, except for diversification policies and the related lack of guarantees of supply for importers also appeared favourable to the producer countries.

The purpose of this section is to analyse the quota, price, production control mechanisms in the 1962 and 1968 ICA's and to compare the same mechanisms in the 1976 ICA. When these mechanisms are analysed in isolation they appear fair and neutral and even biased in favour of producers, but when they are analysed over time and the changes made to the mechanisms in the 1976 ICA are related to the problem of undersupply in the 1970's it is evident that they are altered at the behest and in the interest of the dominant bilateral oligopolists.
The main problem faced by the signatories to the 1962 Agreement was global overproduction. In the mid-1950's for example total coffee production averaged over 72 million bags (Galloway 1973:362). Though production was beginning to fall by the late 1950's, due it was thought to the lack of incentive for producers to maintain trees when prices were low, the gap between the supply of coffee and importers' requirements was still very great by 1961.\(^7\) In that year total world imports was a mere 43.4m bags.\(^8\) The remainder had to be stored in the producer countries. The signatories to the 1962 ICA had a choice between two primary mechanisms around which to structure the Agreement either: direct price control or regulation of the physical quantities of coffee (the supply of coffee) as it passed from producers to importers. They chose an export restriction scheme and hoped that the regulation of supply would lead indirectly to price control.

There are good theoretical as well as practical reasons for eschewing direct price control. Theoretically it can be shown that the effects of direct price intervention are uncertain and might in fact add to, rather than relieve the instability of world coffee flows. Practically, adherence to price control is almost impossible to police. It is not a difficult procedure, as transfer pricing shows, for parties to a transaction to strike special deals and thereby hide the real price paid. On the other hand, control of physical quantities of coffee across state boundaries can be policed. While in practice the Agreement has not been totally successful in overcoming the problem of special deals struck either on a price or a supply basis, it has been successful in creating a degree of certainty and stability in world coffee flows.

The export restriction scheme for coffee was largely inherited from the earlier Coffee Study Group and this has remained the normal method of intervention which economists have favoured (Bilder 1963:333).\(^9\) Economists argue that more direct methods
of price stabilisation seem not to work. In theory it is argued that the stabilisation of money prices will not stabilise, but will instead destabilise, money income if the main source of instability is unpredictable fluctuations in production (Johnson 1967:141). If direct stabilisation of money income to producers were adopted it would probably take the form of multilateral contracts which would specify a maximum price at which consuming countries were obligated to purchase from producing countries. The particular problem for coffee in such an arrangement is that the general price level of coffee is constantly changing because the general price is made up of four separately moving price levels, those of the four varieties. Contracts which attempt to stabilise money income in this way may not actually stabilise purchasing power or real income when there is a degree of movement in the general price (Johnson 1967:141). Also direct price intervention would be inequitable for it would benefit coffee importers more than coffee producers because in the case of coffee, he asserts, price fluctuations are primarily the result of supply changes rather than changes in demand (Johnson 1967:147).

The major practical reason for eschewing direct price intervention is that its effects on both long term price levels and established trade patterns are very uncertain. Uncertainty of effect which might result from direct price intervention was a major concern which was expressed by both importing countries and producers at the setting up of the Agreement. Importing countries were politically unable to agree to a price level which might indicate to their domestic consumers that their own state was endorsing sharp increases in prices. Moreover it was becoming gradually clear that negotiation of specific figures on price-spreads for the various types and grades of coffee was an impossible task in the time available if, in fact, it could be done at all (Bilder 1963:358). Exporting countries were concerned that the uncertain effects which might result from direct price intervention could have the effect of altering trading patterns. This could occur as price intervention altered the price levels of different varieties. In such circumstances other milds for example might begin to be substituted for Brazils
or vice versa and Robustas might begin to be substituted for Brazils or vice versa. Significant shifts in established patterns through substitution would have a direct impact on particular geographical regions and might lead directly to serious political problems between producing countries. Such risks could not be taken, but in direct price intervention such risks are always present.

With quotas, on the other hand, established trade patterns can be serviced and even reinforced. Quotas ensure that changing trade patterns evolve slowly over time, monitored by a world coffee authority. It is probably this political reality, rather than economic argument, that made export quotas acceptable to importers and exporters as the primary mechanism for intervention in the flow of world coffee. It is political rather than economic logic which supports the case for the establishment of an International Commodity Agreement (Gerhard 1963:292).

Stabilisation of price and supply contributes to the efficient use of capital for crops such as coffee. It is also thought to allow producing states to plan their economic programmes in a more rational manner and avoid the disruption that occurs when prices fluctuate violently (Galloway 1973:360-361). Certainty of price and supply also allows importing processors to manage their stockholdings more efficiently.

Another major practical reason for opting for control of supply and not direct price control is that control and regulation, if they are to be adhered to, must be backed up by sufficient authority to uncover misdeeds and impose sanctions if necessary. This requires a policing agent. The International Coffee Organisation functions through its main organs, the International Coffee Council (consisting of all the members of the Organisation) and its executive Board (consisting of eight exporting members and eight importing members, elected for each coffee year). It is important to realise however that the Executive Director and his staff of the ICO have very limited power or authority. This limitation is due to the fact that the members of the ICO are sovereign states. While the International Coffee Council and the Executive Board can sanction a member in
relation to that member's role in the ICO, within coffee countries the ICO can only advise on production programs. Limited powers, coupled with the lack of reliable information concerning prices actually paid by importing firms to producer-based exporting agencies, means that direct price control can not be exercised by the ICO. 10

With export quotas information is more easily obtained because physical supplies are more easily checked. It is not the ICO that does this checking but the importer state through its customs officials at the border entry point. The importing state is the de facto policing agent of the Agreement providing information to the ICO, which the organisation itself could not provide. Quota control as opposed to direct price control is the only mechanism that could have been adopted in the Agreement because it was only by recognising the sovereignty of the state and having the state exercise control over its own domestic industry that the authority of the International agreement could be maintained. The centrality of the state as a policing agent also gives the Agreement some control over flows of coffee to and from non-member countries. For example, importer state control allows the International Coffee Organisation de facto control over importer firms of member states who may wish to buy coffee from exporting non-members in large quantities at lower-than-agreement prices, undermining the established shares of world coffee member exporting countries. Also because it is states which are the policing agents the ICO can exercise de facto control over the quantities of coffee which enter importer states. This also allows the ICO de facto control over the sale of coffee from member exporters so that members cannot hide shortfalls and must hold to the quota allotted. On the other hand, de facto control leaves producer members with great control over domestic price for they can withhold coffee under a quota system just as they could in a competitive market system if their domestic production is greater than their quota.

The choice of quotas as the primary formal mechanism raised the question as to what exceptions to quotas the Agreement would allow. It is significant that the USA and the large Latin
American producers argued that there should be no exemptions from quota restrictions for member exporters (Cartledge 1978:95; Bilder 1963:357 and Marshall 1979:5). This was an example of the collusion existing between dominant bilateral oligopolists and the crudeness of their attempts to retain dominance. However, their position was difficult to maintain because the amount of coffee circulating outside member countries was only 5m bags, at a time when the regulated coffee flow was about 45-55m bags. There were also possible benefits for world coffee as a whole in nurturing the growth of coffee consumption in new areas. The solution proposed in the agreement was to exempt exports to Annexe B countries, 'certain areas of the world having a low per capita consumption and considerable potential for expansion' (Article 40, 1962 Agreement). Annexe B countries include the Soviet Union, South Africa and Japan. The ICO requested that members 'supply such statistics and other information as the Council may require to assist it in controlling the flow of coffee to countries listed in Annexe B and its consumption therein' (Article 40, 1962 Agreement) but in the absence of importer state control there is no mechanism to enforce these provisions. Thus the flow of member coffee to non-member importers is virtually a competitive market. 11

It remains to explain how the actual quotas were allocated. The allocation of quotas and the price mechanism in the 1962 and 1968 ICA's are closely intertwined but we can take these in two separate stages by looking at the determination of quota levels in the first instance, and then at the adjustment procedures for quotas. The adjustment of quotas involves the question of what price levels the Agreement is aiming to defend and by what means the quota adjustment is made as a response to movements in price above or below the defendable level. Clearly when the price falls below the defendable level less coffee must be exported and quotas must therefore be reduced.

The quotas in the 1962 Agreement were expressed in the specific number of bags which was a country's basic quota. The total of these country quotas made up the aggregate number of bags to be exported from all member countries which was the total basic
quota. The total basic quota in the 1962 Agreement is based upon a projection of the future consumption patterns for world coffee minus the expected exports from non-member countries minus expected shipments from dependent territories to the governing country minus expected member exports to non-quota markets and plus or minus expected inventory changes (Msuya 1979:131). Having established an estimate of the total amount of member coffee to be released onto the member market it then became necessary for the ICO to divide up this total into basic country quotas. Countries were given a choice of opting for their quota being based on their average exportable production of either the two coffee years 1961/62 and 1962/63 or the four coffee years 1959/60 through 1962/63. The figure for that country’s exports was established and applied to the estimated total basic quota for the coming year to give the pro rata allocation of a quota to an exporting member.

The importer country members are interested solely in the total basic quota. The USA came to the 1962 Agreement determined to ensure that there would be no exemptions to basic quotas and therefore determined to see that the sum total of coffee circulating internationally should equal the total basic quota (Bilder 1963:343). The big Latin American producers, Brazil and Colombia, held a similar position. For these large exporters their dominance of both old and new markets would be frozen into place if the total basic quota were fixed. However, such a position was unacceptable to small producers who demanded that if quotas to member countries were to be determined on the basis of historical patterns of trade and not on projected production, then at least they be allowed possibilities for expansion in new unregulated markets. Accordingly the Agreement endorsed quota exemptions for new markets as well as exemptions from quotas for small exporters whose coffee exports were less than 100,000 bags. The Agreement also contained a special clause to deal with the situation of dependencies exporting to their metropolitan power. The big exporters and big importers lost out in their campaign to refuse exemptions. Had they insisted it would have jeopardised the entire agreement, and in any case, it is in everyone’s interests to expand consumption and the opportunities
offered in new markets may be better realised where market competition opens these up. Also, it was obvious to the big producers and big exporters that these exemptions did not involve large amounts of coffee.

Once the total basic quota is settled much of the coffee politics in the ICO takes place between exporting members. Exporting members concern themselves initially with the desire to see the total basic quota rise and also to see their own absolute basic quota figure rise but they must also be concerned to see that their proportion of the total basic quota stays the same or rises vis-a-vis other exporters. This is their relative quota. As the absolute quota is based on an estimated figure for the future year's consumption, quotas are often adjusted upwards or downwards each quarter as new information about consumption, supply, etc., becomes available and as the price changes. It is the adjustment of these quarterly quotas which have the potential to affect not only a country's absolute quotas but also its relative quotas and which have over the years caused the most acrimony among exporting countries.  

The 1962 Agreement did not provide an adequate mechanism for the adjustment of quotas.

Under this agreement every price and quota change was to be negotiated separately by the Council. This meant that during the years of erratic prices the Council had to be convened frequently to negotiate price or quota adjustments, and since the agreement did not provide any substantial price or quota adjustment guidelines, the negotiations were very time consuming. Furthermore, in the absence of specific guidelines, differing guesses as to the probable outcome of the negotiations often tended to create considerable uncertainty. (Myusa 1979:132)

The situation was even more serious than Msuya states and was especially serious for small producers. Adjustments were made in relation to the Agreement's stated aim of defending the general level of 1962 prices (Article 27, 1962 Agreement). This aim did not take into account the fact that coffee circulates in four different varieties and that a price which averages out these varieties takes no account of the separate price levels and supply needs of individual varieties. The manner of adjusting quotas on the basis of a pro rata adjustment, which was based on
a price that treated all coffee as though it was a uniform product, severely disadvantaged small countries both in terms of their absolute quotas as well as their relative quota. Under this system the absolute quotas of small producers might be reduced solely as a result of unilateral action by a big producer; Brazil or Colombia could risk quota cuts in their own absolute quota and flood the market, engage in special arrangements or send out tourist coffee, all of which would affect the overall price of coffee leading to absolute quota adjustment. Also small producers could see their relativities change against them even though they were merely responding to the requirements of the circulation of coffee in their own particular variety. For example, Tanzania might sell all its mild Arabicas in member markets while at the same time Brazil's and Robustas were in oversupply. The result would be that, if the price fell below the 1962 level all countries, Tanzania included, had to take a pro rata cut in quota.

During the period of the 1962 Agreement some changes were made to the mechanism for setting and adjusting quotas which appeared in the 1968 Agreement and which to some extent made quota allocation fairer. The main change initiated in March 1965 was a shift to an indicator price which allowed for automatic adjustment of quotas. Under the system the prices of different varieties of coffee were monitored and when the average of these prices over 15 days fell below or rose above a price ceiling then automatic quota adjustments were made. In December 1965 this system was refined even further so that floors and ceilings were put on the main varieties of coffee. The system was fairer because absolute quota setting would be linked more closely to supply and demand of a particular variety of coffee and this meant that relativities might alter in accordance with the type of coffee a country was exporting and not simply the quantity it was exporting. The result was that some major changes did occur in relativities between the 1962 and 1968 basic quotas. For example in the 1962 agreement the total basic quota was 45,587,183m (60kg) bags. Of this total Brazil was allocated 18,000,000 bags (Unwashed Arabics), Colombia 6,011,280 bags (Colombia Milds), Tanganyika (Other Milds) 435,458 bags, Ivory Coast (Robustas)
2,324,278 bags etc. In the 1968 Agreement the total basic quota was 55,041,000m bags - an increase of 10,000,000 bags - of which Brazil's quota was 20,926,000, Colombia 7,000,000, Tanzania 700,000, Ivory Coast 3,073,000. Thus the relative quotas shifted in favour of the other milds in which market demand was strongest and against unwashed Arabicas where it was weakest. The new system was, however, still based on basic quotas determined in relation to historical patterns even though these now included a study of the variety of coffee exported and the total basic quota for that variety. The objection was still made by small producers that setting absolute quotas in relation to historical patterns and not projected production put unfair limits upon the development of their coffee industries (Stuckart 1977:574).

The changes made to the allocation of basic quotas in 1968 taken in isolation, favoured the small producers but these were minor compared with those made to quota allocation in the 1976 ICA. The USA entered negotiations for a new agreement in July, 1975. Its aim was to have the agreement embody measures which would promote production again and to ensure that supply problems would be overcome. With falling prices in 1974 and early 1975 and the 'Black Frost' an unknown event the USA was in a strong position to dictate to the gathering the form the agreement should take. It succeeded in restructuring the 1976 ICA so that quota allocation ensured a continuous supply of coffee and that Brazil's historic share of coffee exports was protected.

The main change made in 1976 was in the manner of allocation of quotas. The purpose was to provide incentives to producer countries to maintain extensive stockholdings inside their country. This change is mentioned in Article 35(1) under the heading ALLOCATION OF ANNUAL QUOTAS. It read,

In the light of the decision taken under the provisions of Article 34 and after deducting the amount of coffee required to comply with the provisions of Article 31, annual quotas shall be allocated in fixed and variable parts of exporting Members entitled to a basic quota. The fixed part shall correspond to 70% of the global annual quota, as adjusted to comply with the provisions of Article 31, and shall be distributed among exporting Members in accordance with the provisions of Article 30.
The variable part shall correspond to 30% of the global annual quota as adjusted to comply with the provisions of Article 31. These proportions may be changed by the Council but the fixed part shall never be less than 70%. Subject to the provisions of paragraph (2) of this Article, the variable part shall be distributed among exporting Members in the proportion which the verified stocks of each exporting Member bear to the total verified stocks of all exporting Members having basic quotas, provided that, unless the Council establishes a different limit, no Member shall receive a share of the variable part of the quota in excess of 40% of the total volume of such variable part. (The International Coffee Agreement 1976:24)

Producer countries, in order to maximise their quotas in subsequent years, are thus encouraged to maximise their production whether it can be sold or not. But as much as 30% of their quota must be held back from the market and stored at their own expense within their own country. At a time of coffee shortage, due to a frost in Brazil, for example, these accumulated stocks are available to flood onto the market. Stocks were brought into the Agreement for the first time because the coffee problem was now undersupply rather than overproduction. Far from being a simple technical device, however, the arrangements concerning stockholdings allowed the importers to structure the Agreement in the way they wished and in a way which put the cost of overcoming undersupply on the small producers. Though the 1976 Agreement did not begin to operate until 1980, when the problem was again overproduction, the innovation of fixed and variable quotas ensured that, in the long run, overproduction would always remain a feature of world coffee and that undersupply caused by some natural catastrophe could not happen again.16

It should not be thought that importers such as the USA devised the 1976 ICA entirely in their own interest for, in altering the manner of allocating quotas they took into account the interest of their bilateral oligopolist, Brazil. Brazil’s problem in signing the 1976 ICA was indeed a serious one. The reason for global undersupply in the early 1970’s was the frost in Parana in 1972. Brazil could support its bilateral oligopolist and sign an agreement which provided supply and stockholding incentives. However Brazil did not want to sign an agreement by which Brazils
quota's under the new Agreement would be based on its reduced production during the years of frost. In other words, the Agreement had to a) encourage production and reward expansion by adjusting quotas upward when this was done, but b) should not reduce Brazil's relative share of world coffee. The first requirement was achieved through the stockholding provision. Small countries could be encouraged to produce and store. The more they did of both the higher their quotas would be. The second part was achieved by having two base years upon which the allocation of quotas were based: one a recent base year that suited expanding producers and one that suited Brazil.

If the Agreement were introduced later than 1976 producers could choose the higher of the two years. Sections 2 and 3 of Article 30 headed BASIC QUOTAS outlined this provision

(2) If, under the provisions of Article 33, quotas come into effect during coffee year 1976/77, the basic quota to be used for the distribution of the fixed part of the quotas shall be calculated on the basis of the average volume of the annual exports of each exporting Member to importing Members in coffee years 1968/69 to 1971/72. The distribution of the fixed part shall remain in effect until the quotas are suspended for the first time under the provisions of Article 33.

(3) If quotas are not introduced in coffee year 1976/77 but come into effect during coffee year 1977/78, the basic quota to be used for the distribution of the fixed part of the quotas shall be calculated by selecting for each Member the higher of the following:

a) the volume of its exports to importing Members during coffee year 1976/77 calculated on the basis of information obtained from Certificates of Origin; or

b) the figure resulting from the application of the procedure established in paragraph (2) of this Article. (International Coffee Agreement 1976:20)

The requirement that producers withhold 30% or more of the production in stocks thus protected Brazil's market share at times of crisis in Brazilian production and Article 30 allowed Brazil to calculate its quota on the basis of a year of known higher production, 1968/69.
Another device built into the agreement to protect Brazil and to ensure continued supply was the new provision on shortfalls. Msuya explains technically how this works though any explanation must consider, as Msuya notes, that the major country to experience problems of shortfall which have any significant effect on world coffee is Brazil (Msuya 1979:146). Thus to a significant degree shortfall provisions in an International Coffee Agreement are provisions designed to deal with frosts in Brazil. Msuya notes,

the agreement requires members to fill their quotas or declare any expected shortfalls as early during the coffee years as possible so that these shortfalls may be redistributed amongst member countries with extra capacity to export. Seventy per cent of any declared shortfall is first offered to members exporting the same type of coffee as the declaring members, and the rest is offered to other members. These redistributions are made amongst members offering to accept them in proportion to their respective basic quotas. An inducement for early declaration of shortfalls, shortfall declared within the first six months of a coffee year are rewarded with a bonus equivalent to 30% of the declared shortfall added to the declaring country's export quota during the following coffee year. The bonus is charged against the quotas of the beneficiaries pro rata to their participation in the redistribution. (Msuya 1979:146)

This provision designed to deal with frosts in Brazil, encourages countries to declare shortfalls and is a way of enlarging the annual quotas of the beneficiaries of the redistribution. But it is also a way of protecting the interests of the dominant bilateral oligopoly. Brazil knew it would have shortfalls but did not wish these shortfalls to effect its quota in subsequent years and the provisions protected the USA which came to the meeting, according to the leader of the American delegation 'determined to secure protection against undershipment' (Coffee International 1976:21).

Price and Production Control

Throughout the 1960's when overproduction was the major problem, the aim of the 1962 and 1968 ICA's was to defend a minimum price or floor price, which was defined as the general price level of
1962. The Agreement contained no corresponding price ceiling (Geer 1971:23). The minimum price was defended, as has been noted, by instituting an export restriction scheme which aimed to regulate prices indirectly. The total basic quota from member exporters was reduced when in a set period prices fell below the 1962 levels. The withdrawal of supply would raise the price and bring it back to an acceptable level. The Agreement worked very well throughout the 1960's not only to hold prices above the floor price but also to reduce the variation in price levels above the floor price. (Geer 1971:183) The success of the Agreement should not be overstated, however, because the fact that the problem was overproduction was a very important part of the success of the Agreement. In the 1970's, when the problem was undersupply, the Agreement worked less well. Also, it should be noted that the very success of the Agreement on the price front in the 1960's contributed to growing ambiguity and confusion on the question of the role of prices under a regulated Agreement.

Under an ICA, the selection of a price to defend is arbitrary, determined not by supply and demand but by negotiation. The 1962 ICA took 1962 prices as a floor price to defend mainly because it was a recent price which, it was argued, was mid-way between what the producers wanted and what the price was likely to fall to given the prevailing conditions of oversupply. But no one could be certain that this was an actual midway point. This uncertainty arose also in relation to the setting of a price to defend for the 1968 Agreement. The existence of indicators in the 1968 Agreement did not alter the fact that an agreement had to be made upon a range of prices instead of a single price to defend. These prices would then be the basis upon which indicators would operate. It was often argued that by 1968 the 1962 price was too low though some economists argued it was too high. Once the Agreement had been operating for some time it was impossible to say what the 'real' market price might be. In many ways the price to defend is only a price to defend because all those party to the Agreement agree to defend it. In market terms it is virtually, as Haarer (1962:452) notes, a fictitious price.
Geer (1971) also makes this point. He notes that there is an assumption among those party to the Agreement that the ICO should not interfere at the level of prices in a way that causes long-term prices to differ from what they would have been in the absence of an agreement. Since the future is unknown a neutral price can be ascertained only ex-post, whereas the technical solution presupposes that it is known ex-ante. This dilemma has led some economists to attack the whole concept of commodity agreements. Kindleberger and Machlup argue that

We lack techniques for determining and applying the equilibrium price in commodity markets. Intervention in the price formation process leads directly to the disequilibrium system in which incentives are created to undermine the pegged price, stocks pile up (or shortages develop) and ultimately the price collapses or explodes. (Kindleberger and Machlup quoted in Geer 1971:41)

There is a further issue, not mentioned by Kindleberger and Machlup, to be found in the fact that price adjustment is an effect of quota adjustment. This concerns the impact of price upon production in the coffee producing countries. The dominant view of the economists is that price provides the incentive to farmers to plant or to refrain from planting coffee. But can one assume such a connection or does one have to demonstrate it? What is evident from the way international prices emerge out of the agreement process is that they bear little or no relation to what is going on at the level of production. The amount and direction of the flow of coffee in the world market, which is being restricted or expanded by negotiation and which eventually should effect price levels, is obviously not a reflection of the amount of coffee that is being grown, processed and either exported or stockpiled in producer countries. There is thus an asymmetry between the stock of producing coffee trees and the amount of coffee flowing internationally. The surplus coffee is kept off the regulated market by the quota system and is either sold in non-member markets or held in stocks. There is an even more important asymmetry between the stock of mature coffee trees and the negotiated price, the difference being very much a question of production policy. In other words, the negotiated price which is set indirectly by the quota system is not linked - under conditions of the Agreement - directly to the amount of
coffee being produced in a country. When the asymmetry between the stock of producing trees and the international price is added to the biological fact that coffee takes between 2-4 years to mature anyway and therefore is only distantly related to price, it becomes very clear that the whole assumed analysis that prices provide the incentive/disincentive for farmers to plant and not to plant coffee can be maintained only if the international price mechanism were accompanied by internationally or nationally devised production policies.

There are essentially two main ways, under conditions of the Agreement, in which production policies can be pursued. The first and the most logical is that production policies be designed at the international level. A policy of this sort would close the gap between the negotiated international price and the incentives/disincentives for farmers to expand or contract their stock of mature coffee trees. Production control devised on an international basis would be in the interests of all coffee actors under conditions of both overproduction and underproduction. If disincentives could be built into the Agreement at the international level during times of overproduction then gradually the need for international intervention would diminish. Exporters would stand to benefit also because they would be freed from the expense that is involved in stockholding and they might also be able to get subsidies from the international body to sponsor diversification programmes and to relocate former coffee farmers. This is in fact precisely what was laid out in the first Agreements. As Geer explains:

the agreement had stipulated that 'not later than one year after the agreement enters into force, the council shall ... recommend production goals for each member country and for the world as a whole' ... intertwined with the issue of production targets has been the question of assisting the surplus-ridden countries in diversifying out of coffee into other economic pursuits. It was felt that the availability of financial and technical assistance would facilitate the implementation of production controls. In 1966, the Council approved therefore, in principle, the establishment of a coffee diversification fund but left the scale of contributions to the fund open. In 1966 and 1967, discussions on the establishment and arrangement of this fund were
continued. Finally, new guidelines for the diversification fund were embodied in the renegotiated agreement of 1968. (Geer 1971:27)

But, as Geer and many others note,

the problem of controlling production on an internationally co-ordinated basis proved to be such a difficult and involved task that it has remained unresolved for the life of the 1962 and the present [1968] agreement. (Geer 1971:27)

This failure reflects not merely a lack of political will on the part of the authorities. Rather, because production control must take place within the boundaries of sovereign states, implementation cannot be policed by the ICO or any other coffee actor apart from the sovereign state itself. While some exporting countries took up the challenge of diversification in the 1960's others did not (such as Colombia). The result was that Colombia was in a stronger position for expanded quotas in the future. Thus the lesson of the Agreement during the years 1962 and 1968 was that production policy at an international level was doomed to failure if its implementation could not be policed in some way. Under conditions of overproduction there was little incentive for importers to engage themselves in debate on production control for their essential concern, supply, was not a problem. Further, they were very hesitant to become involved for fear that they might be asked to contribute to the cost of diversification. The importers took a very casual approach to production policy in the first two Agreements because the problem for coffee relations at that time was overproduction. When in the 1970's the coffee problem was underproduction the importers became sufficiently interested in production policy to press for a linkage of production growth with allocation of quotas in the 1976 Agreement.

Another and more frequently adopted form of production control is that instituted inside developing countries by state planners and state authorities. Because of its politically sensitive nature control usually takes the form of manipulation of prices inside the country, which are then spuriously justified on the basis that prices for coffee are set internationally. Politically this
method is feasible because the assumption is often held within a country that because prices are set globally, the internal price merely reflects this and there is little government can do about prices inside a country. Governments can also be selective in the distribution of necessary inputs such as fertiliser or pesticides and coupled with price manipulation this selectivity can be a de facto production control. Selectivity is often used to favour one area or one group of producers over another. Thus even when production control is internal the existence of an international price plays a role.

The 1976 Agreement is fairly unremarkable on the question of price and production control. The Agreement institutionalises the concept of indicator prices which were again touted as taking defendable price levels out of the realm of negotiation and into the orbit of the market. Kirschen claimed that 'by allowing 'market' forces to determine the famous trigger price level which sparks off export quotas the negotiations have ...for the first time, given the coffee trade a say in the running of the Agreement' (Kirschen 1978:51). There is some truth in this claim for the indicator prices were further refined in the 1976 Agreement. In the Agreement the indicator price determined not only the adjustment of quotas but determined also when quotas would actually begin to operate. The formula agreed upon to have indicator prices trigger the quota system was to take

the average of the last 20 marketing days of the 1977/78 coffee year plus the average of the first 20 marketing days of the 1978/79 year in turn, and their average would spell out the trigger price for the current coffee year. If, during the year, the ICO composite indicator were to fall to or below 15% under the trigger price level and stay there for 20 consecutive market days, the Executive Director of the ICO shall, within 14 days, call the Executive Board which will meet to set export quotas. (Kirschen 1978:51)

The Agreement was also the first to mention an upper price to defend (Stuckart 1977:570). But these refinements did not alter the fact that the formula for the indicator price was a negotiated formula which allowed room, as with earlier Agreements, for argument to take place as to whether the agreed price to defend was too high or too low.
On production control and diversification the 1976 Agreement recognised at last that there is very little that can be done globally to force countries to adopt production controls.\textsuperscript{20} However, it could be said that the requirement under the Agreement to hold stocks represents a \textit{de facto} production control.

The comparison of the formal mechanisms in the early agreements with the changes made in the 1976 ICA contradicts predictions based on the analysis of economists such as MacBean (1966) and Johnson (1977). If MacBean and Johnson were right importers under the 1976 Agreement would be discriminated against by the changes that were made to that agreement. But I have shown that importers did very well out of the changes made to the 1976 Agreement. In fact the changes were directly in the interests of importers for they aimed to ensure supply in circumstances where it was short due to frosts in Brazil. Also I have shown that a comparison of the formal mechanisms in the 1976 Agreement with those of the earlier Agreements discloses discrimination. Big producers and big importers are free to initiate change of the type that suits them when they need to. In the 1962 and 1968 ICA clauses to ensure supply were not urgently needed, but the 1976 Agreement made it mandatory for small countries to hold large stocks. Small countries also had to bear the cost of a quota allocation mechanism that largely benefitted importers and larger producers. In this section I have shown that it is only when we study the formal mechanisms comparatively across agreements and in varying circumstances that it becomes evident that the flow of international coffee under conditions of regulation benefits bilateral oligopolies and discriminates against small producers.

The 1976 Agreement came into operation on 1 October 1980. The effect of the 1975 Brazilian frost was a distant memory and by 1980 the world coffee industry had begun to be plagued by the old problem of overproduction. 1980 was seen as a crisis year. Stocks were rising at an alarming rate amidst suggestions that gross overstocking could be expected in the mid-1980's. At
Goroka in Papua New Guinea the coffee industry was spending millions of dollars on the building of huge sheds in which to store coffee. This pattern was repeated throughout the producing countries. When the Agreement came into operation it failed to stem the plummeting fall in prices. Producers were told by coffee authorities in producing countries that the future looked very grim for the producer. These problems are usually cast as the impersonal effect of market forces. However, as is now obvious it is the 1976 Agreement itself and its provisions for allocating quotas which is pushing the world toward overproduction. When an agreement like the 1976 Agreement is structured with the main aim of putting world coffee back onto a footing of overproduction, it hardly matters what is happening to global demand.

The extraordinary aspect of this process is that the technocrats who work for governments in the coffee industry, such as Msuya of Tanzania and Densley of Papua New Guinea, display naivety in ignoring the effects of the Agreement in structuring outcomes and resorting to simplistic market explanations. Both adopt the technocratic logic the Agreement pretends to be based on. Msuya’s advice to Tanzania is precisely of this type. He concludes his study by writing that,

> Our empirical results and discussions thus far lead one to believe that Tanzania could improve the size and predictability of her earnings from trade in coffee by adopting a production and export expansion policy. But before one can recommend such a strategy it is necessary to evaluate the trends and prospects of consumption and production in the major consuming and purchasing areas. (Msuya 1979:148)

This should be regarded as a naive conclusion given the powerful hierarchical and structured interests which dominate the Agreement. Densley advises Papua New Guinea to expand forthwith noting that if quotas do come into operation then it is in Papua New Guinea’s interests ‘... to maximise coffee exports to member countries in the period prior to 1978/80’ (Densley 1977:18).

When quotas did return in the 1980/81 season it was obvious that in broad terms the world coffee industry had changed little since
the 1960's. The overall quotas were put at 57.37m bags, a figure slightly more than that of the first year of operation of the 1968 Agreement, though in 1980/81 basic quotas were immediately cut as the indicator fell below 135 cents (Marshall 1981:4). The amount of coffee going to non-member had barely changed from the 5m of the early 1960's. In 1980/81 non-member sales were as high as 7.7m but soon settled down to the expected 6m figure (Marshall 1982:3). Overall then, it would appear, the period of international regulation followed by a period of restructuring which did not substantially alter coffee relations, merely reinforced the prior pattern of flow of world coffee.

THE COST TO SMALL PRODUCERS OF ICA MEMBERSHIP - INSTITUTIONALISATION, LEGITIMACY AND THE ROLE OF THE STATE

The main cost to small producers of international regulation is encapsulated in the figures which show that the Agreement largely worked to freeze the distribution of market shares as they existed between 12-20 years ago. The principal mechanism of the Agreement is export quotas and as late as 1981, when quotas were operating under the 1976 Agreement, the allocation of quotas could be determined on export figures from 1968/69. Small countries like Papua New Guinea, whose independence came only after the beginnings of the ICA have had little chance to sponsor their industries and expand without the limitations of regulation. The vent for surplus existing in the non-member market is hardly viable because of its small size and slow growth. In any case, prices in non-member markets are always much lower than that in member markets. The very existence of price stabilisation probably means that the traditional market shares and division of labour among exporters is reinforced by the Agreement (Payer 1975:183). The reinforcement of traditional market shares may be the main cost to small producers of international regulation, but it is a cost which is quite intangible and rests on the counterfactual and unproven assumption that, without regulation, small producers would have done better in world coffee than they have done under regulation. I will not attempt such a proof, but will show in this section that small producers have experienced tangible economic costs
under the Agreement and political costs in that the ICA has been institutionalised within producer countries by having the producer state perform a midwife role for the ICA.

The economic costs experienced by small producers include the fact that under the workings of the agreement the cost of any significant global readjustment which has been required has been borne by the producing countries. This was the case with the diversification programme of the 1960's and is the case with stockholding schemes in the 1980's. The idea behind the Diversification Fund was that at a time of overproduction, producers in exporting countries ought to be encouraged to diversify out of coffee and into other economic activities. Some countries, took the diversification suggestions from the ICO very seriously though there is no easy way diversification could have been enforced and in any case the producer countries were paying the total cost of the programme. It could well be argued that the dilemma of overproduction was caused by the producer countries and therefore it is fitting they should pay the cost of diversification. It must be remembered, however, that the problems were exacerbated by the imposition of quotas in the Agreement. These quotas benefited both importers and exporters and in this sense it seems unfair that producers alone pay for long-term programmes designed to alleviate overproduction.

In the case of the variable quota provisions in the 1976 ICA producer countries paid the full cost of ensuring continuous supplies to importing firms. The producer countries can not be blamed for undersupply, for they continue to grow and trade coffee in circumstances of coffee shortage. Importing firms must, however, have supplies and have managed, through the 1976 Agreement, to have developing country's take responsibility for ensuring long-term supplies. The importers have also managed through the Agreement to pass on to producer countries the very high risk involved in holding stocks when prices are falling (Business Week, July 6, 1981).

It would be wrong, however, to consider the costs of the Agreement to producers solely in economic terms. More important are the political costs of the ICA. In general, the political
costs include the fact that the ICA imposes itself upon small developing countries in a way that causes their internal choices to be structured by external factors. The ICA embodies a series of structures which are imposed upon the coffee industries of small producers. These structures achieve the institutionalisation of the ICA within producer countries. They generate the legitimisation necessary to have it accepted inside a producer country that the ICO is the governing body of world coffee. The structures also create the concrete institutional channels by which actors inside producer countries can participate in the ICO.

Legitimation of the Importer/Exporter Cleavage

The International Coffee Organisation was set up in 1962 under the auspices of the United Nations, which meant that the internal structure of the ICO, including voting rights, membership, etc., had to conform with UN requirements under the standard set forth in the Havana Charter. Among the important provisions of the Havana Charter was the requirement 'that participation by all countries be permitted on equal terms and that the exporting countries as a group have equal representation in any agreement' (Bilder 1963:341). Also of significance was the point that 'the interests concerned are represented not by the industry or consumers but by the government of countries which declare themselves to be exporting or importing members' (Geer 1971:28). To give legitimacy to the deal finally struck at the first of such agreements it was declared that an international commodity agreement has to be signed in a conference held under the auspices of the United Nations and that only the Secretary-General of the United Nations can commence the first session of the administering council (Geer 1971:28).

In line with the Havana Charter the agreement shared out votes within the ICO to importers and exporters on an even basis. The 1968 ICA for example in Article 12 stated:(1) The exporting members shall together hold 1,000 votes and the importing members shall together hold 1,000 distributed within each category of members - that is exporting and importing Members respectively -
as provided in the paragraphs of this article; (4) ... votes of exporting members shall be divided among those Members in proportion to the average volume of their respective coffee imports in the preceding three-year period ...; (7) No member shall hold more than 400 votes. Thus in the 1968 agreement votes among importers were distributed as follows: USA - 400 votes, Federal Republic of Germany - 101, France - 84, Italy - 47, Sweden - 38, Netherlands - 35, Canada - 32, etc. Among exporters votes were distributed as follows: Brazil - 332, Colombia - 114, Ivory Coast - 47, Portugal - 48, Uganda - 41, El Salvador - 34, Mexico - 32, Tanzania - 15, etc.

It is obvious that such a structure of voting, while balancing importer/exporter interests, also accommodates nicely the interests of dominant bilateral oligopolies. The agreement allows for the possibility of collusion between Brazil and the USA, giving them the capacity virtually to force through a position, as well as veto power over their importing or exporting group (Marshall 1972:133). The structure of voting, and in particular the dominance of Brazil over exporters, is functional for regulation. On the one hand it manages to contain the inherent conflict among exporters and on the other hand the belief that Brazil is an exporter no different to other exporters generates legitimacy for Brazil’s dominance. The issues that have divided the exporters are legendary and have broken out from the very first meeting to set quotas when many exporting countries claimed special circumstances in their demands for higher quotas (Bilder 1963:333). Exporter countries have fought bitterly over the issue of quota allocation at almost every session of the ICO. Naturally all exporters want higher quotas but obviously the agreement cannot work if all exporters get higher quotas.²¹ Also big exporters such as Brazil may have a greater interest in restricting export country quotas than working to extend them. In fact it has been well known for some years that a key role of Brazil has been to keep other exporters in line (Cartledge 1978:180).

The decision making process within the ICO is further structured to allow for collusion between big importers and big exporters and to distance small producers from big exporters and from
decisions taken in the interests of dominant bilateral oligopolies. Big exporters have little need to attend to ICO directives - Colombia, for example, used diversification funds to switch to a new fast-maturing coffee plant. They can raise prices at will by withholding their own coffee (Geer 1971:186) or they can threaten small producers with price falls by promising to release their accumulated stocks. Small producers have very little power within the Agreement to challenge the dominance of the big exporters. Not only do they have a very small number of votes, but much of the decision making within the ICO takes place at the executive level within a board of eight exporters and eight importers. The board is democratically elected by a ballot of exporting and importing members respectively. On the exporter side, board members are usually representatives of the major producer organisations. These organisations change regularly though the oldest, Oamcafe, was established in 1960. It is made up of eight French-speaking African coffee producers. The two other main producer groups in existence in 1981 were the Interafrican Coffee Organisation, also set up in 1960, which contains 19 member countries producing about 28% of world supply, and an international organisation, World Coffee, created in 1973 by five leading producers (Brazil, Colombia, Costa Rica, Angola and Ivory Coast) and controlling 80% of world production (United Nations 1981:137). These organisations exist to co-ordinate the interests of their member countries’ demands for quotas, etc., within the ICO and attend meetings with set demands negotiated within their groups (Kirschen 1980:40).

The problem with the role of these organisations in the executive and their role in co-ordinating a position on quotas is that small producers become further and further removed from the ICO centres of power through this process. The producer organisations and the existence of the executive create multiple layers of authority each dominated by a large exporter which merely legitimates bilateral oligopoly dominance over the executive. Through the power of the executive the small producer can continually be presented with a fait accompli when it comes to decision making. This was done in 1976 when the negotiations to set up the new Agreement took place within a small group of eight (Coffee International 1976).
The single most important barrier to understanding the political cost to small producers of ICO membership is the dominant view that big exporter interests and small exporter interests can be conflated. The reason this view is so pervasive is that almost all analysts consider the importer/exporter cleavage to be the primary structure in which international coffee trade relations and international coffee political relations take place. The importer/exporter cleavage is relevant for the ICA works through a quota system which is policed at the import/export point. But it would be fundamentally misleading to consider this the primary cleavage in world coffee. Taken in isolation, the importer/exporter cleavage does not explain why coffee actors act the way they do, and its persistence as the primary mechanism in the minds of analysts of world coffee can only be explained by the failure of economic analysts to fit bilateral oligopolies into their market models. Further, some analysts are linked to the bilateral oligopolies themselves and thus have a vested interest in reinforcing a view of the world that assures the legitimacy of the dominance of world coffee by the USA and Brazil.

The Role of the State

It is a paradox in the structure of the ICA that though most international coffee trade - processing, roasting, soluble manufacture and retailing - is in private hands the delegates who attend ICO meetings are representatives of governments. The role of government officials in these negotiations is a direct result of the sections in the Havana Charter which state that parties to the Agreement must be governments. But what role does the state play in ICA's? How do the distinctive features of the state affect the success or otherwise of the Agreement, both when it is actually operating and when it fails to adapt to changing circumstances? How exactly does the state legitimate the power of the dominant bilateral oligopolies? Finally, what is the effect of the state's role in the agreement on the domestic role of the small producer state?
Economists have attempted to explain the role of the state as though the state were itself a market actor aiming only to maximise its own returns. Waters writes,

The implementation of the ICA constitutes an attenuation of the property rights of various parties in order that others, usually those in authority, can appropriate to themselves in either pecuniary or non-pecuniary form a share of the existing rewards. (Waters 1974:789)

Another view of the role of the state is expressed by Rangarajan. He writes,

The charitable explanation [for governments joining ICA's] is that they are legislating for a visionary world - again, for what ought to be rather than for what will be. The cynical explanation is that it is a political act for the benefit of the main participants. (Rangarajan 1978:161)

In the economists' writings on the state we are presented with two main explanations for state involvement in ICA's. The state is either a rational actor, and therefore the equivalent of a market actor maximising its own interest, or the state is an irrational actor and therefore pursuing idealist or political aims.

It is the custom of economists to assume that political goals are by definition irrational. The image presented in both views is of the state bumbling into a market place, replacing the more rational market forces and leaving long-lasting distortionary effects in its wake. All of these arguments, in the usual manner of economists, tend to turn the real world upside down. As we have already seen, the international market in coffee has failed of its own accord numerous times and without the help of the state. No agreement, whether it be based on exporters alone or in combination with some importers, has been thought to have the remotest chance of success if the members were not states. Waters' explanation fails because even at the level of appearances the state has functions quite different from those of market actors. The unique qualities of the sovereign state cannot be reduced to buying, selling or producing. Among these unique qualities is the spatial function of boundary maintenance.
through internal/external differentiation and the political role of monopoly of coercion. It is precisely these properties at the level of appearances which make state membership indispensable for any international agreement. Beneath these procedural advantages that the state offers for the achievement of an international agreement is the substantive one that state participation in ICA's is functional for international capital. This functionality, however, must not be thought of as the state being an instrument for international capital, for underneath its international role is a domestic one whereby it must ensure the conditions of national accumulation. To ensure national accumulation the state at the international level must retain a degree of relative autonomy. It must aid international capital as thoroughly as possible at the level of circulation but it must be able to distance itself from international capital whenever this threatens domestic accumulation. The clearest label one can put on the state's role at the international level is therefore that of midwife for international capital.

A key feature of the modern state is its control over definite spatial boundaries. It is a feature of the modern state which gives it both an internal and an external role. This spatial characteristic was first elaborated as a legal aspect of the state, as sovereignty. Sovereignty asserts the idea that there is a final and absolute authority in the political community - the state - and that no final and absolute authority exists elsewhere (Hinsley 1966:26). Sovereignty theorists acknowledged that the exercise of this final authority was coterminous with physical boundaries but in their thinking the spatial factor was downgraded in favour of the legal implications. The study of sovereignty suggested that there was a differentiation between two levels of state activity, but sovereignty theorists cast this differentiation solely in terms of the patterns of authority at different levels rather than the internal/external differentiation which a spatial analysis would emphasis. Sovereignty theorists admitted that sovereignty was Janus-headed,
to the problems which arise in the relations between political communities, its function has been to express the antithesis of this argument - the principle that internationally over and above the collection of communities, no supreme authority exists. (Hinsley 1966:158)

But sovereignty theorists failed to bring these two levels together in their analysis. The sovereignty thesis has had to be modified by students of politics because it suggested a rigid relationship between a pattern of authority and the domestic or international community with which it was related. Or to put it another way, it was only by seeking refuge in legalism that the analyst could possibly pretend that some states were not more powerful than others at the international level or that there might be actors in the domestic society and economy as powerful as the domestic state. Also such a conception of separate spheres of state power did not attend to the important political changes that can lead to an alteration of either relationship.

For this reason, Weber's notion of territorality is now favoured in place of sovereignty. The notion of territorality does suggest spatial differentiation between domestic and international levels but it does not prejudge political outcomes in the way the sovereignty thesis does. Territoriality can deal with a 'separation between internal and external, regardless of the form of the internal order or that of the external relations. This separation is inherent in the concept of territory' (Freund 1968:220). Territoriality emphasises the spatial dimension of the modern state, for it assumes that politics takes place within a circumscribed territory. The frontiers of the state do not have to be strictly established in this analysis, they may be variable, but without the existence of a territory individuating the group, there can be no external politics.

It is safe to say that without this notion of a territory individuating the group, without the participation of the state and its spatial differentiation into internal and external levels, an ICA based on export restriction quotas would not be possible. The export restriction quota scheme works on the basis of regulation through interruption of the flow of the green
coffee bean. The break must be made at a point in the marketing chain which is uniform for both producer and importer. If such a uniform break point did not exist attempts to flout the regulation scheme could never be brought under control. Further there must be a significant degree of control by an agency at the point of break because quotas must be easily adjustable to changes of supply and demand.

The quota scheme thus relies on another feature of the modern state identified by Weber, that the state has a monopoly of the means of legitimate coercion. The obvious point at which control can be achieved is the point at which the commodity crosses national frontiers. This is a point where the state exercises almost total control. The involvement of the state as a member of the ICO ensures that the Agreement can use this special power of the state to regulate the movement of coffee. The Agreement makes use of the state's monopoly over the legitimate means of violence for the state's agents of coercion, customs officers, are the real policemen of the ICA. The main point of control in policing the Agreement which has been used thus far is the point of import. In the first 1962 ICA, coffee entering an importing country was accompanied by a certificate of origin. Once a country's total quota of exports had been imported that country was simply not able to release more coffee onto the world market. By 1965 this method of policing was being evaded by producers who were exporting coffee first to a third country and then on to an importer. This coffee, known as tourist coffee, was halted by measures taken in 1966 when the ICO issued stamps to producers equivalent to the amount of coffee each country was allowed to export. The number of stamps issued to each country was the same as the quota and these were held in a country's central bank to be dispensed by an ICO approved domestic agency to exporting firms. This made the job of policing quotas easier for importers because any coffee accompanied by ICO stamps must be legitimately within the global quota. The issue of stamps merely formalised the power of the ICO but did not extend it and it did not alter the crucial policing role performed by the importing states.
The notion of internal/external differentiation which is structurally present in the modern state served further purposes for the establishment of an ICO, given that its members were states and not market actors. Making a uniform break in the flow of green bean at the point of export meant that coffee relations could be treated quite separately at the internal and the external level. The internal and external levels of coffee flows are like two separate policy fields. Each has a distinct pattern of coffee relations and within each the exercise of ICO authority takes a different form. At the external level, the midwife role of the state ensures that importers and big exporters are favoured in the operation of those ICO clauses which are designed to prevent price manipulation. At the internal level importers are favoured because they do not contribute to production control or diversification programs inside producer state; but at the internal level the main beneficiary is the domestic state (both importer and exporter states) because the ICO respects the internal sovereignty of the state and does not predetermine the structure of internal coffee relations.

At the external level the Agreement contains two articles, 32 and 33, which impose sanctions on any coffee actors who attempt to manipulate the world coffee price (though, for obvious reasons, the articles are relevant only to the very large exporters and importers who have this capacity). Both articles operate on the assumption that there is a direct connection between price and supply. The basis on which an attempt is made to sanction price manipulators is of course the primary formal mechanism in the Agreement, the quota restriction scheme. But there are at least three limitations to this structure which cause it to fail to sanction big exporters and big importers. The first limitation is that the Agreement can do nothing if the larger exporter decides to obey the quota system but sells at a secret price which is higher or lower than the current price. The second limitation is that Article 33 (1962) contains a major qualification of the extent to which price manipulators through quota shortfalls are punishable anyway. The article ensures that the decision to sanction a member depends on whether the country
with the shortfall can get the numbers in its favour in the ICO vote. As I have already shown, the voting system favours the large bilateral oligopolies so it is very unlikely that in such a vote Brazil would not be able to get the assistance of its bilateral oligopolist partner, the USA. The third limitation of the Agreement which modifies the operation of the sanction articles is the fact that the entire Agreement is designed to work on supply only so there is no possible way that Articles 32 and 33 can sanction importers. Geer (1971:180) notes that importers can contribute to price instability - price manipulation in my terms - by holding stocks to depress prices. But the Agreement has no authority at all on the demand side of the equation.

The agreement works, even through its sanction articles to reinforce, or at least accommodate existing power centres at the external level i.e., the bilateral oligopoly of Brazil and the USA. The role of the domestic state is crucial in masking this simple fact. The role of the domestic state, because it has a formal equivalence with other states, masks the fact that the price-quota connection is not direct and that the actual operation of the sanctions on price manipulation can only benefit large exporters and importers. The formal equivalence embodied in the state makes it appear that all states can manipulate prices equally and that they will be sanctioned equally. Similarly, the membership of the domestic state and the policing of quotas at state boundaries reinforces the view that importer/exporter cleavage is the most important in coffee relations. In fact, collusion between big exporters and big importers is facilitated through the operation of the agreement but because the domestic state has been co-opted as a midwife to facilitate this collusion and to deliver small producers and small importers to the bilateral oligopolies this collusion is not revealed.

At the internal level - and again the internal/external differentiation structurally present in the modern state makes the identification of such levels plausible - the agreement also operates to reinforce existing power centres. It does this
mainly by recognising the internal sovereignty of the state in domestic society and not predetermining the nature of state-society relations in any of its member states. The reality of state internal sovereignty has implications for importers and producers as well as for the role of the ICO itself. For the state in producer countries the advantage is that it can participate in the ICO without undermining its own power to regulate internal coffee trade.

The ICA has been institutionalised within small producer countries. What is most important in the institutionalisation process is that government membership in the ICO ensured that the power of the state (small producer and otherwise) would be enlisted to reinforce the ICO. It has been shown that the ICO could not possibly have operated without the co-operation of member states, and not member firms or individuals in member countries. In fact the participation of governments in the agreement generated a certain legitimacy for the agreement by reinforcing the importer/exporter cleavage and by giving the appearance of a formal equivalence among participants. This formal equivalence was based on the fact that all the members were states. The role of the state goes beyond the generation of legitimacy, however, for the small producer state plays a vital role as midwife in the regulation of international coffee. The small producer state allows regulation to proceed through its special qualities of territoriality, sovereignty and its internal/external differentiation. Further, the role the small producer state plays in the flow of international coffee is that of agent in dominance of the bilateral oligopoly of Brazil and USA. In other words, the small producing member state has been co-opted through regulation to secure the interests of the dominant bilateral oligopoly.

The ICA is built upon the myth of formal equivalence among members, a myth perpetuated by United Nations backing of the agreement and by the Agreement's liberal form. The liberal form of organisation embodied in the apparent representativeness of the voting system promises broad participation in the politics of the Agreement. This element of participation gives small
producers the illusion of the possibility of achieving structural change to world coffee relations through the mechanisms of the Agreement. But the form the Agreement adopts tends to have the effect of reinforcing existing coffee relations. Liberal forms tend to institutionalise and formalise structural differentiation among participants. At the same time by broadening the basis of political participation they hold out the promise that adjustment mechanisms can be adapted to achieve shifts in power relations. In fact, as we have seen, the changes that have been made to the various agreements have been functional changes designed to provide technical solutions to problems rather than an alteration of power relations. Thus the agreement does not allow for the possibility of seriously curtailing the power of the dominant bilateral oligopoly.

Conclusion

This section has attempted to explain the social and political bases of world coffee flows. Such a study is new in the field of international commodity agreements, for ICA's are usually studied in terms of their technical and economic efficiency. But a full and detailed account of world coffee flows under conditions both with and without regulation is an essential precondition for the study of coffee industries in small producer states. This section has shown that the social bases of world coffee flows is a system of bilateral alliances containing importers and exporters which can be ranked hierarchically according to the volume of coffee they control. The political base of world coffee flows is usually the International Coffee Agreement. the ICA is a system based on the regulation of export quotas and one which works through the domestic state as its principal political agent. The dominant bilateral alliance has, through regulation, co-opted the small producer state to act in the interests of the bilateral alliance because under the Agreement the small producer state takes the role of midwife to international coffee capital.

The uncovering of the social and political bases of world coffee flows has implications for the development of coffee industries in small producer countries. Small producer countries pay at
least three major costs of international regulation. For a start, the expansion of their industries is restricted because the agreement tends to freeze coffee flows on the basis of past performance rather than future production. Second, small producer country coffee industries are expected to bear the direct cost of any attempt to restructure world coffee relations. Third, and most importantly, coffee industries in small producer countries pay the political cost of having an internationally co-opted domestic state.

The complex interweaving of international and domestic factors is discussed in the following two chapters on the colonial and post-colonial coffee industry in Papua New Guinea.
Endnotes

1. This is the argument that peasant producers respond irrationally to low prices by continuing to produce. These farmers, it is argued, do not evaluate their domestic labour costs. A fall in prices will induce those producers aiming at a stable income, in monetary terms, to increase production.

2. A basic combination might be to use Brazilian beans as a base, add a Robusta to increase volume and add a Colombian for taste.

3. The lack of information related to world coffee flows is of course a major problem and one which has hampered this study. The problem is clearly outlined by UNCTAD

Information on the functioning of coffee markets for both raw and processed coffee products has been primarily disseminated by the ICO secretariat. There is still a lack of continuous and accurate information on the supply side, such as on acreage, yield and related characteristics of coffee trees, on labour, on capital stock and depreciation methods, on investment, on wages, on interest rates, on credit and aid, on ownership of farms, on participation in cooperatives, on export and domestic taxes, and on domestic trade participants operations - volume, fees, profit margins etc. Worst, there is very little or almost no published information on the demand side. Work extended to cover the publication on a regular basis of data and information on these areas by the ICO Secretariat would probably respond specifically to element (a) of the agreed international framework, contained in UNCTAD Resolution 124 (v) Section III, para. 2, particularly if it also included information on the functioning and operation of the commodity exchanges. (UNCTAD 1983:49)

4. While it is certainly the case that transnational corporations dominate the demand side of coffee flows i.e., the processing and sale of the consumable item in the west it is much less certain that they play a major role on the supply side i.e., the production side. Indeed, where bilateral trading relations are established on the basis of
political or taste factors, it is not possible to assume for the case of coffee that control over demand has a very significant effect on supply. This is especially the case given that over 50% of the flow of world coffee is handled by independent trading houses and that General Foods and Nestle have a limited role at the level of production in the periphery. This is a key weakness in the analysis of Dinham and Hines as they seem to recognise when they note that, 'both General Foods and Nestles are changing their buying policies so that they are making few direct purchases from producer countries unless they have subsidiaries there. Instead they are moving increasingly towards general purchases on the world market' (Dinham and Hines 1983:65). Dinham and Hines recognise that this trend makes transnational corporations less significant on the supply side although they mask the consequences of this trend for their own analysis when they write,

This is not to imply that the companies have lost their potential for direct leverage over a producer country. In 1977 for example, General Foods ceased direct purchases of Ugandan coffee as part of a boycott of Amin's regime; the following May, the company halted indirect purchases via its importers and brokers. (Dinham and Hines 1983:65)

However, the trouble with Uganda began much earlier and was related to Uganda's takeover of the coffee traders. Uganda was unusual in that transnational corporations had played a domestic role in its coffee industry (see A. Waters 1974:785).

5. There are at least two further objections to analyses which assume that the existence of international commercial capital suggests primacy of the market. The first - and not surprisingly given my emphasis on the importance of authority relations as the basic structure through which world coffee flows take place - is that analyses based on market models of economic behaviour have generally failed to explain the behaviour of actors at various levels of the coffee commodity chain (from peasants to multinational corporations) or predict with accuracy (allowing, of course, for random
factors such as weather) future flows of world coffee. A second, and related, objection is that analyses based on the primacy of the market tend to distort and misinterpret the nature of structures in production inside developing countries particularly those in which coffee is produced in peasant households. Analyses of this type find it necessary to argue that peasants respond solely to price (as in Geer’s analysis) or they do not respond to price (as in the backward sloping supply curve arguments) when in fact neither view may properly describe the complexity of the process of peasant household reproduction. Analyses of this type, though faulty, tend to be the type that inform policy making and therefore have quite significant effects upon domestic coffee production.


7. I will be avoiding throughout the tendency in economists’ analyses to conflate importer requirements with consumer demands. Each of these groups have quite different considerations which govern their actions. Importers decisions are affected by:

a) corporate planning, such as the exigencies of stockholdings,
b) the requirements of domestic market manipulation, and
c) blend requirements in the processing stage and the demands stemming from the need to deliver agreed quantities to wholesalers and retailers.

All of these demands affect the importers requirements on volume and price in a way quite different to considerations governing consumers decisions. It appears that the considerations which govern the actions of importers are closer to those of producers than those of consumers.

9. There are other mechanisms which can be used for stabilisation such as:

1) trade quotas,
2) long run purchase contracts, and
3) buffer stock schemes.

Buffer stock schemes have been favoured by various developing countries in general though economists have argued that for at least two reasons they are less suitable for coffee. The first reason has been outlined by Edwards who notes that,

An examination of the relative merits of buffer stocks and quota policies reveals that there is very little to choose between them on practical grounds. Policy simulations suggest that while both have reasonable success in dampening out short-term fluctuations, only quota policies are likely to have any effect on the long term cycle owing to their freedom from resource constraints. (Edwards 1977:193)

The second reason has been outlined by Gerhard who notes,

That the choice of methods associated with buffer stocks is extremely limited and the criteria for negotiability is far from sufficient to ensure economically positive effects - at least as long as renegotiations are hampered by incomplete foresight. Thus buffer stock schemes require a degree of agreement between countries not likely and a commitment over a longer time than the coffee cycle would seem to allow. (Gerhard 1963:277)

10. A major problem that arises in relation to production is due to the fact that members of the ICO are sovereign entities is that the ICO can only advise countries on production programs. The ICO cannot force sovereign states to adopt production policies it would favour. We will see later however, that the ICO through the 1976 ICA did manage to more or less dictate production policies through forcing countries to hold certain stocks.
11. The non-member markets are as competitive as taste factors will allow though, unlike member markets, taste preferences in the new markets are not established hence there is a good deal of competition between exporters.

12. Some economists upon noticing this interproducer rivalry have even argued that the main purpose of the ICA is not to regulate prices at all but to manage a conflict between producers, a conflict which is structural because some are producers of Robusta and some of Arabica. Kabir-Ur-Rahman Khan notes the Agreement,

Though coy about giving open recognition to the differences between the [producer] groups has been moving slowly toward resolving them. The stated objectives of the Coffee Agreement do not refer specifically to these conflicts nor to the existence of any machinery to deal with them. (Kabir-Ur-Rahman Khan 1979:181)

13. The colonial clauses in the Agreement in some cases allowed colonies total exemption. We will look at a relationship of this type between Australia and Papua and New Guinea in Chapter 3. See Article 3 and paragraph (1) of Article 67 in the 1962 Agreement for more details of the special provisions made for colonies.

14. As Bilder shows this is where real coffee politics inside the Agreement takes place. Of the original negotiations in 1962 he writes,

The real negotiations, therefore, centred about the question of the 'division of the pie' - the share which each country was to have in any global quota, and the general basis on which such shares were to be calculated. Of course, each country argued for a system of allocation which would tend to increase its relative share; and many countries suggested that their case was unique and their needs greater, and that they should therefore be entitled to special treatment and a higher quota than other countries. Thus, the large established producers wished quotas to be based primarily upon supply and historical shares of the market. Moreover, in order to further protect their existing market positions they wished the respective shares of the various exporting countries to be firmly
established in the agreement and not to be subject
to later negotiation. The newer African producers,
on the other hand, while developing productive
capacity and a belief that the trend in consumer
preferences would continue to favour their coffees,
wished quotas to be established on the basis of
potential production, with relative shares to be
subject to flexible adjustment based upon the
demand for different types of coffees as indicated
by price or the degree to which quotas were
actually utilised. (Bilder 1963:356)

15. The strengths and weaknesses of the indicator system are
clearly explained in L. Kirschen (1974).

16. Technocrats like Msuya (1979:144-145) overlook the
significance of the change to fixed and variable quotas.

17. As Geer notes,

Contrary to other international Agreements no
provision was made in the International Coffee
Agreement regarding a corresponding price ceiling
and subsequent obligations of member countries if
the price ceiling is reached. (Geer 1971:23)

Doubtless the long period of overproduction seemed to
preclude the need for building a price ceiling into the
Agreement. Of course, the indicator price scheme did mention
an upper price to defend but in the absence of production
goals or stockholding schemes this mention of an upper price
was fairly meaningless.

18. Kindleberger and Machlup are arguing that the fictitious
price created by ICA’s exaggerates trends in the price and
supply areas rather than correcting them. This exaggeration
may not be apparent in long periods of stability but it is
this very gap between the market price and the defended price
that can ultimately lead to a collapse of agreement. In the
case of coffee the problem surrounding price levels that
Kindleberger and Machlup allude to is exacerbated because, as
prices are not tackled directly by the agreement in the ICO,
a time lag develops between action taken on quotas and effect
on price. The lag problem can be a serious one for all
coffee actors. Importers find their inventories being
altered in value some time after new quotas have been established. Importers as well as exporters attempt to cover the lag by selling on the futures markets but this is only possible for corporations and large firms. Inside producer countries, scaled down prices are charged immediately for coffee delivered by small growers even though this new price may not yet be reflected in export prices. A very significant surplus can be transferred from small producers to big coffee processors and exporters inside coffee growing countries in this way. Further, the gap between quota and price creates the precondition for a great deal of manipulation of pegged price levels, not only through special deals but in the political struggle that takes place within the ICO. The ambiguity over prices and the gap between prices and quotas means that under conditions of regulation the management of international coffee flows and prices is an intensely political process in which price and quota merely reinforce existing power relations which have their base in taste patterns and past colonial linkages.

19. Geer regards the linkage of production control with price as the most desirable form of international regulation. However, it is implicit in Geer's views that price control (direct or indirect) which is separate from production control virtually ensures that production control will be unsuccessful.

If such a change [production control] in the national policy of a producer country cannot yet be attained through an international commodity agreement it follows that no long-run equilibrium price, as defined under price competition, can be arrived at. This, then, leaves room only for bargaining between both sides of the market determined through an identity of interest. The bargaining solution prevents the two results stated above (surplus as a weapon in price war and oligopolistic indeterminate prices). Given the structure of the world coffee industry, the ICA seems thus to be the only possible second-best solution that could be aimed at. The further regulation of production goals is thus not relevant if we analyse the International Coffee Agreement as a form of exemption, since the production policy does not influence the price determination on the
world market so long as the agreement stays in operation. (Geer 1971:176)

20. Msuya notes that,

Under production policy, the new agreement merely expresses the producing countries undertaking to adopt and implement a production policy. The agreement leaves it for each member country to define its own production policy and provides that the Council may establish procedures for coordinating the said country's production policies. (Msuya 1979:148)

21. Some small producer delegates to the ICO show a failure to come to terms with existing power relations as exercised through the ICO. J. Munnell, Chairman of the CIB in Papua New Guinea, for example, when he led the Papua New Guinea team to the ICO conference, claimed there were three reasons why Papua New Guinea should be given an increased quota:

1) It has an outstanding stock of 63,000 bags from 1980/81 season;

2) Some ICO countries were unable to meet their quota in the 1980/81 season; and

3) Every member country wanted an increase. (Post Courier Sept. 28, 1981)

22. Related to this explanation is the view of Arthur Selwyn Miller-Forward and others who argue that the state acts for nationalist reasons.

By and large, accordingly, it may be said that the state intervenes in privately conducted transactions to the extent deemed necessary to further the overall goals of the American people. (Miller-Forward 1963:271)

23. In contrast to the modern state, it is important to stress that private corporations and other market actors do not embody this internal/external differentiation. Market actors exist in a world market where they aim to simply buy cheaply and sell at a profit. The important break point in their activity, as Marx has shown, is at the level of production where they consume labour and means of production in the process of production. The break occurs between the M-C
phase and the C – M phase in Marx's terms. This break point occurs at very different points in the production process not only from industry to industry but from enterprise to enterprise. Capitalists know the concept of spatial boundary only as state boundaries, an external factor which merely introduces distortionary factors into the process of production and exchange.

24. Tourist coffee was coffee shipped from signatory producing nations to either new markets or non-signatory importing countries and then reshipped to signatory importing countries without the original certificates of origin or export stamps.

25. One criticism levelled at commodity agreements is that there is a tendency for a producer to violate the quota and sell at the artificially maintained price. This was in fact a major problem during the first years of the Agreement. In 1966 however, the Council adopted the stamp plan. It is enough to note that the plan has been successful and today overshipment is not a major problem for the Agreement.
Introduction to the Study of Coffee in Papua New Guinea (PNG)

The following chapters aim to show that the 'dialectic of underdevelopment' theory, developed in the earlier chapter can be used to explain the complex process of the establishment and development of commodity production, class struggle and the role of the state in the coffee industry of Papua New Guinea. The following chapters also aim to demonstrate the accuracy of the theses on the politics of coffee in Papua New Guinea which were presented in the introduction to the thesis. In particular, the chapters will show how class struggle in the industry, as it is constituted and reconstituted by the market and the state, discriminates against smallholders in the industry.

The study of the coffee industry in Papua New Guinea begins with the assumption that development is as much about the structure of social relations of production and exchange as it is about the efficient use of productive forces. It is in the form and nature of social relations in an industry, the extent to which antagonism frustrates the development of some and enhances the development of others, that the secrets of development and underdevelopment lie. Thus the aim of this section is not to analyse the coffee industry in terms of the price competitiveness in the industry, the relative efficiency of smallholders compared with plantations, or the price responsiveness of smallholders, etc., but to analyse the process of political and social change in the coffee industry. A study of the coffee industry in Papua New Guinea presents a challenge because of claims that the industry is highly competitive at the level of production and exchange (World Bank 1981:6 Annexe). This competitiveness is often taken to mean that smallholders benefit from the operation of the market in Papua New Guinea in a way they do not benefit in other state-dominated coffee industries.

The focus on social relations rather than market relations is especially appropriate in a study of the coffee industry for it is an industry in which price competitiveness at the
international level is virtually eliminated in times of regulation (except in non-member markets) and is severely modified under other circumstances, due to rigid patterns of international trade based on the taste factor, as I have shown. Thus price levels cannot be influenced by the efficiency or price responsiveness of actors within a producing country. In any case, the comparatively simple transactions which go on at every level of the coffee industry through the mechanism of price mask many complexities in the commodity chain, among them the wide economic and political gaps between those who are party to the transactions.¹

Arabica coffee is grown in the Papua New Guinea Highlands. The term 'Highlands' refers to the complex of mountain ranges, intermediate valleys and plateaus of the central cordillera, among which are the Hindenburg, Kubor, Schrader, Bismarck and Kratke ranges of mountains, the Wahgi, Chimbu, Goroka and Bululu valleys and the Kainantu plateau. The physical characteristics of the Highlands region make it highly suitable for coffee production. As described by Hewlett, the terrain is characterised by steep, often sheer slopes, sharp ridges, the scenes of innumerable landslides and swift rivers in the steep narrow valleys' (Hewlett 1967:33-34). The high altitudes and the accompanying temperature and rainfall patterns make the Highlands climate 'on the whole regarded as favourable for coffee production' (Barrie 1956:4).

The Goroka valley and the Kainantu plateau, which together make up the Eastern Highlands Province, contains the optimal physical and climatic conditions for growing coffee. The Goroka valley is really a series of valleys which occur between mountain ranges, such as Mount Otto and the Asaro ranges. It is drained by two rivers, the Asaro and the Bena Bena. The Goroka valley is known for its mild temperatures - much lower than those on coastal lowlands - relatively low humidity and cool nights. Goroka town was the first Highlands town to be established (1939) and it became an important transport and market centre both because of its strategic location at the heart of the highlands and because of its attraction for white settlers. Goroka also became and
remains the centre of the Highlands coffee industry. The Coffee Industry Board (previously the Coffee Marketing Board) is located in Goroka as is the country’s largest coffee exporter, ANGCO. Goroka was the area in which pioneers of the coffee industry, Jim Leahy and Ian Downs, settled and established the first coffee plantations. For these reasons, the empirical work for this study is based on the Goroka valley.

THE ORIGIN OF THE COFFEE INDUSTRY IN COLONIAL PAPUA NEW GUINEA

I begin with a descriptive account of the origins of the industry in Papua New Guinea. A descriptive account serves the purpose of providing the historical background that has shaped the distinctiveness of class locations and class relations in the coffee industry of colonial Papua New Guinea. However, it will be obvious throughout this section that description must give way to theoretically informed analysis for political and social relations in the coffee industry in colonial Papua New Guinea to be explained.

The development of the commercial coffee industry in Papua New Guinea Highlands was from the beginning marked by the same distinctive historical circumstances as foreign penetration of the Highlands itself. In particular, the key role played by white individuals and the administrative state, the backwardness of existing social relations and the lateness of penetration were characteristic of both penetration and the development of the coffee industry.

Plantation-led Growth in the Early Coffee Industry in Colonial Papua New Guinea

Small areas of Arabica coffee were first planted in the Highlands at Kainantu and Korn farm (Mount Hagen) as early as 1935. Little more was planted before 1939 except at Wau. Many of these early plantings were by missions, hence in very small quantities. During the second World War it appears that the Australian New Guinea Administrative Unit (ANGAU) may also have experimented with small areas of coffee production. In addition robusta
coffee has been grown in coastal areas of Papua New Guinea since the turn of the century. Coffee exports from New Guinea in the years preceding the second World War were slowly increasing but still totalled only 74 tons in 1940/41.

The first person to grow coffee commercially in the Highlands was Jim Leahy. He and his brothers, Mick and Dan, were the first white men to explore the Eastern Highlands in 1933. Jim later took up residence at Goroka where a village west of the township offered him 150 acres and the administration, though with misgivings about encouraging white settlement in the Highlands, granted him residency and finally an agricultural lease. This was in 1947, the year he planted his first six acres of coffee. Dan and Jim Leahy were not rich men. Dan recalls that the money he spent on the failed Kuta coffee plantation $\$40,000 - $50,000, almost broke him. Jim stated that the main reason he went in for coffee and not tea was because it could be grown economically in practically any amount and because coffee processing machinery was relatively simple and inexpensive (Finney 1973:44).

The period 1948-1951 was a trial period of white settlement in the Highlands as far as the administration was concerned. The administration was not then encouraging alienation of land from indigenous ownership and only about half a dozen plantations were established in this period. But in 1952, the administration abruptly changed its tune and in May of that year it publicly opened the Highlands to applications for land alienations (Finney 1973:44-45). In the following July, Jim Leahy harvested coffee from his original six acres. It was '... a year of world shortage, and the price he was paid, seven and nine pence a pound, has never been equalled in Papua New Guinea since. Then everyone started to plant it' (Ashton 1978:191). The land rush was on. Ian Downs, then Acting Director of the Department of District Services and Native Affairs, was sent to Goroka to investigate. This land rush, with which Downs was later to become involved personally, resulted in the alienation of dozens of agricultural properties in Goroka totalling 3550 acres between 1952 and 1954, a tenfold increase over the acreage alienated during the previous three years. Although this was still a
small area compared to the total area of the Goroka valley (Finney 1973:45). It was however, enough to ensure that by 1955 the plantation section of the industry was established basically in the form in which it exists today and that the plantation section would dominate the coffee industry in the early years of colonialism. In 1955 there were 55 European holdings in the Eastern Highlands, out of 76 in the Highlands as a whole. Today there are 44 large plantations in the Eastern Highlands and 88 in the Highlands as a whole. In 1955 plantation holdings in Eastern Highlands covered 14,642 acres of land though only 2026 acres were under cash crop cultivation. Today 12,800 hectares of land are covered by large plantations of which some 10,800 hectares are under cash crop cultivation (mainly coffee). In 1955, 45 non-indigenous and more than two thousand indigenous workers were employed on these plantations. By 1954, although the plantations had only been established in the previous four years, the Highlands had established itself as the second largest coffee bearing area in New Guinea. Today Highlands coffee totally dominates the coffee industry and the plantation sector remains proportionally an efficient and important part of that industry. While the bulk of coffee is produced by smallholders, and smallholders own by far the bulk of coffee trees, the high productivity of plantations makes their contribution to production an important one.

The settlers lost little time expanding their influence beyond production into both marketing and the political sphere. Jim Leahy bought out a number of other plantations in partnership with his Collins and Leahy nephews. In 1960 he led a syndicate of three in buying Asaro plantation from Jim Taylor, a move west which culminated in Collins-Leahy setting up and managing the first coffee processing factory in Chimbu at Kundiawa. In the east Collins-Leahy spread as far as the purchase of Mick Leahy’s Markham Valley property and established trade stores and marketing channels in Kainantu (Ashton 1978:192). Jim Leahy was primarily interested in the commercial and agricultural development of the coffee industry, though he was responsible with Jim Taylor and George Greathed in founding in 1953 the first political association in the industry, the Highlands
Farmers and Settlers Association (HFSA). In 1956 Ian Downs resigned as District Commissioner and '... with a feeling of relief... I entered the private sector as a beginner to join in the expansion of the coffee industry and face the marketing problems that would have to be overcome before coffee could make so much more possible for the Highland people' (Downs 1978:246-247) Downs became the key political figure in the development of the coffee industry in the 1960’s, as founding Chairman of the Coffee Marketing Board to February 1965 and then as President of the HFSA from 1956 to 1968.

Much of the work of Downs and the HFSA was intensely political. The need for political action and political organisation began virtually with the first substantial quantity of coffee production in Papua New Guinea. The problem was that of finding a market for a crop that had increased from 87 tons in 1953/54 to over 2000 tons in 1960. When a panic about markets began in 1959/60 the estimated 1961 crop was 3000 tons, with a carry over from 1960 of nearly 300 tons (Cartledge 1978:54). The HFSA began a campaign in January 1959 to ensure that the coffee industry in Papua New Guinea would not be stunted due to its inability to find a marketing outlet for the crop. Related to this campaign was the administration’s change of policy to discontinue active promotion of coffee planting by smallholders, though assistance was still given freely when sought and plantings continued at a high rate.

The main activity of the administration and the HFSA in this period was to establish a most-favoured-nation agreement with Australia for Papua New Guinea coffee. The 1959/60 season was the first year that many trees would come into bearing and it was also the first year that a lot of coffee from Papua New Guinea had to be marketed (Cartledge 1978:52). The HFSA argued for a 1/- lb duty on coffee coming into Australia from places other than Papua New Guinea. This would, according to the HFSA, allow Papua New Guinea to take its rightful place in the Australian market. The Australian Treasury and Department of Trade were against any attempts to apply new duties and argued that any such measure was contrary to the ICA and to GATT (Cartledge 1978:67)
but what they offered to Papua New Guinea was remission of the existing duty of 3\textsuperscript{rd} per lb for new coffee. The offer was made at a somewhat acrimonious meeting in March 1961 and was grudgingly accepted by Papua New Guinea in August 1961 as a temporary measure pending a Tariff Board enquiry. Papua New Guinea was of the opinion that the 3\textsuperscript{rd} remission did not provide sufficient incentive to clear the market and in any case did not offer an incentive for Australian manufacturers to take increasing amounts of Papua New Guinea coffee as Papua New Guinea production continued to expand. The HFSA began an intensive lobbying campaign during the period between August 1961 and the Tariff Board enquiry of April 1962 and achieved great success. Not only did the HFSA manage to have existing duty on coffee raised but Papua New Guinea coffee was given very high levels of remission on other coffee if large quantities of Papua New Guinea coffee were taken (Cartledge 1978:64-65).

Coffee production in Papua New Guinea was also given special treatment when Australia entered the 1962 and 1968 ICA's on behalf of its colony, Papua New Guinea. The 1962 and 1968 International Commodity Agreements (ICA) in coffee made specific allowance for the colonial relationship. Article 67 of the 1962 ICA stated that:

\begin{enumerate}
\item Any government may, at the time of signature or deposit of an instrument of acceptance, ratification or accession, or at any time thereafter, by notification of the Secretary-General of the United Nations, declare that the agreement shall extend to any of the territories for whose international relations it is responsible, and the Agreement shall extend to the territories named therein from the date of such notification.
\end{enumerate}

The wording of Article 67 does not make perfectly clear in what manner the dependent territory's exports are tied to the metropolitan country's imports. Is it the case, for example, that the dependent territory's de facto export quota under the agreement is the amount of coffee it can sell to its metropolitan power (i.e., the Contracting Party to the Agreement)? Is the dependent territory forbidden under Article 67 to export to other countries? Or, conversely is it the case that a dependent
territory's export quota is the same amount of coffee as the import quota of the Contracting Party to the Agreement? In other words can Papua New Guinea under Article 67 export 156,000 bags, regardless of what portion goes to Australia? Finally, what happens under the agreement when the exports of the dependent territories begin to exceed the imports of the contracting party to the agreement? Is this extra coffee non market-coffee? Is it time then for the colony to be given its own export quota or can the Contracting Party to the Agreement with its dependent territory become, in effect, an exporting group and be given a joint export quota? If so, does the importing country receive votes in the ICO according to its importing status or its exporting status by virtue of its tied relationship with an exporting dependent territory? These problems became central to the 1966/67 crisis in Papua New Guinea for they gave rise to the phenomenon of netting, the belief on the part of planters that Papua New Guinea could export to member markets an amount equivalent to the import quota given to Australia. We will see, how the politics of the 1966/67 crisis drew the planters in Papua New Guinea into conflict with the metropole and the administration over the extent to which the metropole as guardian of the international agreement should interpret the agreement in a way that put a squeeze on plantation capital in Papua New Guinea.

The HFSA supported a policy, embodied both in the International Coffee Agreement and in the most-favoured-nation remissions of duty, which would link territory production with Australian imports. The HFSA argued that such a linkage was necessary because the coffee industry in Papua New Guinea was in the early stages of development and because marketing conditions were difficult in the early 1960's. The HFSA argued strongly '... that in theory and practice New Guinea may never produce sufficient coffee to meet the total Australian requirements' (Cartledge 1978:29). However, the establishment and reinforcement of a linkage between Territory coffee production and Australian importers - both through the ICA and through the remission of import duty in Australia - created a much more complicated political situation in the industry. This was 1960,
a time when most of the rest of the world was being decolonised and newly independent nations were eager to see the process of decolonisation completed throughout the world. The process of structuring Papua New Guinea's economy to be complementary to Australia's, firmly accepted by all political actors in Papua New Guinea, was regarded with suspicion in other places. Thus, the linkage between Territory production and Australian imports had to be made on the basis that this was good for the industry as a whole and was not a result of collusion between white planters and metropolitan or colonial state officials. The high profile taken by the HFSA did not help to lend legitimacy to the idea that the linkage was in the interests of the industry as a whole. For these reasons, and because the operation of the ICA demanded it, there developed in the early 1960's a need to establish a Papua New Guinea coffee authority of some kind.

The establishment of the Coffee Marketing Board (CMB) and the outline of its functions was done within the framework of political relations described thus far. It was the metropolitan departments, the colonial administration and the planters who discussed the CMB and decided on its future. After some discussion and confusion as to what powers the authority should have it was finally set up in August 1964. Though not given authority to undertake marketing of Papua New Guinea coffee overseas, the CMB was expected to exercise a good deal of control over exports. The CMB has always been seen in Papua New Guinea as being primarily concerned with international coffee relations, with exporters and the ICA and there have rarely been serious suggestions that the CMB monopolise or delegate monopoly control at the internal level.

This simple description of the pattern of political activity in the industry in the colonial period shows that state/class relations between planter, the administration and the metropole are complex. There is, however, a need for an analytical understanding of the form and function of the CMB and the way in which it constitutes class struggle, including the role of smallholders.
The Emergence of Household Commodity Production in the Coffee Industry of Colonial Papua New Guinea

The first indigenous plantings of coffee in the Highlands were a few in the Asaro valley, Eastern Highlands in 1952 though the smallholder industry really began in 1954. From the beginning the growth of the smallholder coffee industry was indeed spectacular,

plantings by indigenes soon exceeded those of Europeans so that by 1961/62 over 60% of all coffee acreage and about 43% of the output was under indigenous control. On the assumption that in most cases 'native' coffee units are one quarter of an acre (and the average is probably less than this) a large number of 'native' families obtained a cash income from coffee production after only 8 years of planned extension effort.  
(Cartledge 1978:42)

However, the halt in extension around 1960 hardly affected the growth in smallholder production. Smallholder coffee production had shown a steady upward trend in the 1960's. From 1966/67, when smallholders were producing 10,600 tonnes, to 1975/76, when they produced 29,900 tonnes, the growth of smallholder producer was great, about 12% p.a. (Anderson 1977:71). By 1977 the major producers of coffee were the smallholders whose average 450 coffee trees were added to their subsistence gardens. By then there were over 200,000 smallholder coffee growers who were producing over 70% of the total coffee crop (Anderson 1977:4).

The smallholders who began growing coffee in the 1950s in the Highlands of Papua New Guinea were not producing commodities for sale in a market in the period before penetration. Coffee was, in most cases, the first commodity they produced. Prior to penetration, development was based on the rudimentary development of the productive forces and a division of labour based on gender and age, not skill (Salisbury 1962:49). The principal food crop in the Highlands was sweet potatoes which formed about 90% of the diet of Gorokans (Howlett 1967:66). The households and the clan which they made up were expected to be self-sustaining, the producers were expected to consume directly the fruits of their production. They were able to do this because the producer was
not alienated from the land and the labour required to produce food. The major exception in the Highlands to the production of things for use was, as Gregory shows, the production of things for gift and ceremonial exchange, especially pigs (Gregory 1982:91). Leadership in Highland societies took place at the level of the clan and principally in relation to ceremonial and gift exchanges. Some big men could amass wealth and prestige, i.e., pigs, to lead the clan in these exchanges with other clans. There was no formal office of leadership.

It is clear that neither the rudimentary nature of the organisation of use-production and gift exchanges nor the social structure based on the role of the big man, as clan leader, proved a barrier to the introduction of cash crops. However, what is not clear is precisely why this should be so and, once commodity production for exchange in market is introduced, precisely what changes occur in the system of use-production and gift exchange and the system of leadership as a result of this. The standard answer to this question is to focus on the role of the big man and argue that as the big man’s status was achieved through the amassing of ceremonial and wealth gift-things for exchange the traditional culture was preadapted to the amassing of money from the sale of commodities by modern entrepreneurs (Finney 1978:108).

It is entrepreneurial skill pre-existing in traditional society which Finney argues explains the growth of the coffee industry. There are a number of objections to this argument. A major one, as Standish has argued, may be that the belief that big man status is achieved is an overstatement and that big men are big men often because they have ‘hereditary advantage,’ i.e., there are advantages for members of certain lineages and even instances of succession to leadership in Highlands societies (Standish 1978:33). While the question of ascription or achievement is important for the general question of leadership in Highlands society it may not be very important at all in terms of the spread of coffee production.
What would seem more important than leadership in the spread of coffee production is the capacity for coffee production to be incorporated into existing production units. The spread of coffee occurred throughout the Highlands very rapidly and in many cases long before the benefits of its exchange were known. This is because coffee takes some three to four years to bear. Obviously those who planted coffee expected a return but its success as an innovation may be less to do with the demonstration effect of leadership and more to do with the fact that coffee production could be incorporated into the existing household reproduction cycle. Coffee could be produced on customary land with a marginal improvement in rudimentary tools. Because it could be produced at the household level where the division of labour was ascribed and therefore not under the influence of the big man, the incorporation of coffee into the household reproduction cycle did not, in the first instance, disrupt established social and political roles in the clan. I will show in a later section just how rudimentary and limited is coffee production at the household level.

Smallholder coffee production does not appear to threaten existing power relations for it is incorporated into the household reproduction cycle. As Bernstein (1977:63) shows, the peasant household can continue to produce use values alongside its production of commodities. Indeed, the plot of coffee may be so small as to appear irrelevant and to have little or no bearing upon the households social relations. Bernstein shows how quantitative measures – say only 20% of labour time spent on commodity production – also give the impression that production of the commodity is merely an adjunct to subsistence. However, once commodities have become incorporated into the household reproduction cycle so also do the conditions necessary to produce the commodity (i.e., supply of seed, land) become internalised in the reproduction cycle to the extent that reproduction of the whole household can no longer take place without the production of the commodity side of its activities, in other words, commodity production becomes an economic necessity. To meet its needs for cash the household produces commodities which become, through the circuit
of exchange, material elements of constant capital (raw materials) and variable capital (food). (Bernstein 1977:63)

This has a profound effect on the relations of the household to other social actors. Instead of being subsumed under a clan, the household comes to relate to capital. In the long term this leads not to an enhancement of the role of big men as Finney would argue but perhaps to a demise in the status of a big man whose influence is based on exchange of use-values. The big man’s authority is supplanted or at least shared by authority exercised by various interests in the production and supply of cash crops such as coffee buyers, processing plants, exporters and the state.

The production of commodities by the household brings the household into indirect struggle with capital. Capital aims, as always, to appropriate the surplus from the exchange of commodities. Class struggle in this case is 'silent', muted by the fact that the conditions of backwardness still apply at the level of production of the class of smallholders (small peasants). In a smallholder industry, by definition, production is taking place at the household level. The household producers can not be as easily disciplined as wage labourers because the householders continue to own the means of production. This is the second aspect to the continuation of backwardness which exists in the smallholder industry. Short of destruction of an entire strata of an industry, capital has no possibility of increasing its share of the surplus in the orthodox and most durable way, through re-organisation of production along the lines of a division of labour based on the sale of labour power in a market. Capital is thus reduced to three main ways of increasing its share of the surplus: 1) intensification of household labour in producing the commodity through perhaps a deterioration of the domestic terms of trade, 2) plundering the surplus through export taxation or 3) freeing one of the productive forces, land, from household control. The role of the state is crucial for all three ways. The aim of the private actors in most cases is to hitch their demands to the banner of
the state. We will look at all these methods in the Papua New Guinea smallholder industry both in colonial and post-colonial times and in relation to the recent 20-hectare development.

This section has attempted to uncover the complexities in both the organisation of production and the political struggle that faces the smallholder sector of the industry. Much greater detail will be given later concerning the precise nature of smallholder production and the political struggle in which smallholders are engaged. However, given what has been said so far it should come as no surprise that the 'silent' class struggle was evident in the period of the founding of the coffee industry in colonial Papua New Guinea.

An example of this 'silent' class struggle between smallholders and capital in Papua New Guinea was that, at the exact time that the CMB was being established, ostensibly because controlled marketing was 'particularly in the interests of the local people' (Cartledge 1978:76), the Administration was acting against their interests by withdrawing its support for smallholder coffee production. This withdrawal of support was presented by the Administration (through its functional agency for coffee, DASF) as merely a failure to stimulate the smallholder industry. It was emphasised by DASF however that smallholders would be offered assistance should they request it (Finney 1973:66). This decision came after great pressure was applied to the administration by planters and the CMB to close down the smallholder industry because planters '... felt that the surplus stock and marketing problems had arisen largely because of governmental policy to allow continued expansion of indigenous plantings' (Cartledge 1978:202).

The 'silent' class struggle is also evident in the fact that smallholders were able to defy the Administration's withdrawal of support by continuing to increase coffee production and expansion. The smallholders did not mobilise politically to achieve this outcome but this does not alter the fact that as a class they refused to be constrained by the Administration. Why does the CMB claim to be acting in the interests of the
smallholders when at the same time it is lobbying to restrict their production? And why is it that the administration falls prey to this pressure, attempts to implement it, but holds back from using the full coercive power of the state to enforce it? Is this a result, as the above suggests, of its sensitivity to its governmental obligations toward smallholders? Is it a result of countervailing pressure from smallholders? If so, what form does this pressure take, political or economic? Finally, how is it that in the face of a virtual bar by the Administration on extension advice and the provision of seed etc., smallholders can continue to develop, produce and plant coffee? The answer to these questions will be presented in the following section where it will be shown that none of these outcomes are accidental but the result of a 'silent' class struggle between smallholders on the one hand and those organised politically (planters) and the agencies of the state on the other.

The State and the Origins of the Coffee Industry in Papua New Guinea - Exigencies of Lateness of Penetration

Even at the level of description, the outline of the origin of the coffee industry is not complete without a recognition of the key role played by the state. At this point it is sufficient to treat the state as merely the composite public authority and not in terms of its component parts, as I will do later. I have shown how the industry was founded by settler/explorers who established a very undercapitalised plantation sector, that local production was built on a base characterised by backwardness and that the early days were marked by the difficulties of establishing a market for 'new' coffee in a regulated international market. All of these characteristics are related to the lateness of penetration and all of them ensured that the state would play a significant part in the development of the productive forces for coffee production.

The colonial state played a role in supplying seed and keeping Papua New Guinea coffee free of disease (New Guinea Highlands Bulletin, October, 1965). The state also had an effect upon the factors of production - land, labour and capital - in the early
coffee industry. Land is the most important factor of production then and now, the most difficult to regulate and the area of most vital concern to the plantation and smallholder sectors of the coffee industry (and indeed all other agricultural industries in Papua New Guinea). Until the Second World War land in Papua New Guinea was regulated by the Regulation Ordinance of 1888. This ordinance prohibited private buyers from dealing in land.

However, after the Second World war dealing in land began. In the Highlands this trade devolved upon the district commissioner who, at the time of the establishment of the plantation industry in Eastern Highlands was Ian Downs. Hasluck wrote,

strictly in conformity with policy, no acquisitions were to be made in disregard of the present and prospective land needs of the native people themselves, but in fact we were back to the days of 'Have a yarn with the district commissioner and he will fix you up'. In practice the district commissioner with the best of intentions and with an undoubted idea of bringing benefits to the native population had become a promoter of settlement. (Hasluck 1975:121)

Hasluck intervened to stop the land rush which resulted but the land problems were never solved by the colonial administration. The package of land bills presented finally in 1963 were not workable in terms of detailing the processes of inquiry into customary lands. The bills aimed to speed up land tenure conversion to freehold and leasehold suitable for use as large scale agricultural units i.e., plantations but all they achieved was policy dominance from the centre and virtually no change in customary land tenure patterns.

Labour was the other vital productive force which was affected by the role of the colonial state. The colonial labour laws were complex, covering almost every conceivable aspect of the contract under which labour was recruited, employed and repatriated and the conditions under which labourers lived while they were at their place of work (West 1958:90). Colonial labour laws, like land, were effected by changes occurring during the war but this was less to do with the disruption to labour caused by the war and more to do with economic growth which followed the war as in
the coffee industry, and which brought labour into short supply after the war. In labour legislation, there was also a move toward centralisation and control of labour after the war - most evident in the Highlands Labour Scheme - though the initiative in this area seems to have lain less with Hasluck and the metropole and more with the Administration. Perhaps related to this fact is the point that, unlike colonial land laws, colonial labour laws actually worked and achieved their purpose. This purpose was the prevention of full proletarianisation not, as the administration often claimed for the purpose of easing indigenes through the transition from village to modernity. It was not even to ensure the village would subsidise the labourer but rather, via manipulation of conditions and contracts, to ensure that wages would remain fixed at low levels. It became especially important after the war in conditions of labour shortage that wages remain unaffected by market determinants such as the general wage level in the economy and by the possibility that labourers might find alternative, non-regulated employment. In achieving this purpose colonial labour legislation and the requirements of the planters in the coffee industry were compatible in a way that colonial land policy was not.

The effect of the colonial state on the other major productive force, capital, was also significant but largely because of the neglect of state expenditure on agriculture in colonial Papua New Guinea. In New Guinea, where coffee was grown, only some $2,771,433 was spent by the DASF in the year to June, 1966. This was almost double the $1,361,702 spent by DASF in the year to June, 1962. This increase clearly reflects the 'development push' that began in Papua New Guinea in the mid-1960's. But the amount spent on agriculture in New Guinea in 1966 was far below that spent on Public Health, $6,118,632, Education $6,901,761, District Administration $2,939,632, Stores and Supplies $4,949,348 and Capital Works and Services $7,750,725. Thus directly productive areas were neglected in favour of infrastructural development and social services as late as 1966 and agriculture - the sector that provided a living for most people in the country - was only receiving some 5% of expenditure from revenue in New Guinea and only 4% of expenditure from

The description of the origin of the coffee industry in the Highlands of New Guinea presented above confirms empirically the theoretical point made in the first chapter: that an explanation of the role of the state is essential in understanding development and underdevelopment and is the key to unlocking the intersection of imperialism, class and state. In the description of the origin of the coffee industry it has been shown that development in the industry and the structuring of political and social relations in coffee was crucially affected by what the state did and did not do. But a mere description of developments in an industry does not make clear just what sort of state it is nor what form the state takes in its various functional branches nor how these branches function in relation to the dominant class of planters and in relation to the subordinate classes of labourers and smallholders. It is not clear from a mere description of the role of the state whether the state acted as an instrument for white planters, or for the metropolitan bourgeoisie or whether the state retained a degree of relative autonomy from these dominant classes allowing it, if not to favour the interests of labourers and smallholders, at least to consider their interests in the context of the development of the coffee industry as a whole. In other words, a descriptive account of imperialism, class and state in an industry does not explain which class benefits from the role of the state nor how the state constitutes and reconstitutes class struggle in that industry.

A description of the origin of the coffee industry does not provide convincing evidence that the colonial state acted as an instrument in the service of white planters. Thus, while the colonial state called a halt to smallholder expansion, it did not back this up with full coercive power of the state as it might have done. The land policy of the state also generated a degree of hostility toward the state from planters. Downs labelled the Administration as 'indifferent and incompetent' in its approach
to agriculture and felt administrative structure and policy was interfering with any possibility of agricultural officers in the field getting results (Downs 1967:12). To complicate matters further the closeness of the metropole to the colony has meant that an explanation of the role of the state must include the fact that the metropolitan state was active in pursuing interests which sometimes conflicted with both Administration and planters interests. This was undoubtedly the case in land policy but it was also the case in other areas where the metropole intervened in policy either to enhance its direct control or to restrict its capital outlays in the Territory. In other instances, as in the case of the Tariff Board Inquiry, the metropole could accommodate the demands of the administration and the planters providing this did not conflict too seriously with the metropoles international interests and the interests of its metropolitan bourgeoisie, in this case instant coffee manufactures in Australia. All of these factors make the task of explaining the role of the state more complex than a mere description of development and underdevelopment would allow.

CLASS LOCATION IN THE COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

A critical and interpretive analysis of development and underdevelopment in the colonial coffee industry of Papua New Guinea must begin with a study of class location. Class location is established according to the structure-in-production existing within an industry, which gives rise not only to an exploited and exploiting class but sometimes to fractions of these classes and often to intermediate social categories. Class location is a study of exploitation on traditional Marxist criteria. It is a study of the ownership and control of the means of production and the manner by which surplus value is appropriated from those who sell their labour. Class location, the focus of this section, is analytically distinct from the study of class relations. Class relations (objective and subjective), the focus of later sections, is the study of the translation of exploited and exploiting classes into relations of dominance. Class relations of dominance is the study of class mobilisation, class as a
process in which classes adopt political and social forms which will enhance their position vis-a-vis antagonistic classes in boundary struggles. The role of the state, ethnic differentiation, the history of class relations and manipulation of markets all become important at the level of class relations. In this section, however, the focus is on production, the aim being to show how class locations in the colonial coffee industry of Papua New Guinea were determined by the two dominant forms of production in the industry, plantation agriculture and smallholder production.

The class locations which exist in a structure in production based on both plantation agriculture and smallholder production are very distinctive. The exploiting class (white planters in the colonial period) in the most advanced form of production (plantation agriculture) exploits a class of wage labourers but does not directly exploit the class (small peasants) which is located in the less advanced, smallholder form of production. The different forms of production which occur in the industry impose severe limits upon the white planters ability to control developments in the industry at the level of production. On the one hand, white planters are subject to the limitations of plantation agriculture itself which include the fact that they are limited to the production of absolute surplus value and that plantation agricultural production relies upon a continued supply of cheap labour. An added difficulty for colonial planters was that their expansion was restricted by colonial land laws. On the other hand, white planters' control of developments in the industry is limited by the fact that they cannot control the smallholder crop at the level of production because smallholders are not directly dependent on planters or the state in order to be able to produce coffee. Control of the smallholder crop thus became an urgent concern of the white planters in the period after the imposition of ICO quotas when quota limitations forced smallholder coffee and plantation coffee to come into direct competition.

The basic reason for the failure of white planters to control smallholder production is to be found in a study of the form of production in which smallholders are engaged. The distinctive
aspect of smallholder production is that it takes place within the household as the unit of production. Most of the inputs required to produce coffee are provided from within the household and associated kinship relations just as labour required to care for and harvest the coffee is provided by the family. The economic behaviour of a household as a unit of production is different from that of a unit of production such as a plantation which is based on the appropriation of surplus value from sellers of labour power. For one thing, the behaviour of the household as a unit of production is determined less by the logic of accumulation and more by the needs of the reproduction of the household itself. A household of this type is a capitalist form of production, for obviously the production of commodities has entered the households' reproduction cycle. However, because it is simple commodity production taking place within the household and geared to the reproductive needs of the household itself simple commodity producers are less vulnerable to control from capital than are wage labourers. The class location of the smallholder is thus highly unusual, for while the smallholder is clearly a member of an exploited class this exploitation is less direct. The continued survival of the household as a unit of production means exploiting classes cannot control small holders through the production process as they do with wage labourers.

In this section, I am aiming merely to establish the distinctive nature of these class locations based on the two forms of production. It is only through a study of the structure-in-production that the analyst can confidently locate the range of the classes that can emerge from the development of the productive forces in that industry. Though the detail in this section will relate to the colonial coffee industry the points made about the various structures-in-production in coffee and the classes formed in them will apply to the post colonial coffee industry of Papua New Guinea also.

**Plantation Agriculture**

The original white planters were attracted to the production of coffee because of the low level and inexpensive nature of the means of production. The BAE survey (1961) showed that the major
investment made by the white planters in coffee was in land and plantings and plant and machinery. Capital outlay was small, for the 30 plantations [surveyed by the BAE in 1959] the average capital investment per acre of total coffee planted was 444 pounds with a range between 277 and 853 pounds. (Cartledge 1978:46)

The white planters were competitive capitalists. Their location in production imposed severe limitations on their self-expansion and accumulation.

The original thirty settlers were particularly fortunate in their acquisition of land for they managed to obtain agricultural leases in Goroka ranging from 36 acres to 410 acres - though the optimum area for European settlement was 200 acres - before the land rush and before the authorities clamped down on the alienation of land (Finney 1973:51). The alienated land was obviously valuable but due to the low and regulated price at which they acquired it and the fact that transactions in land soon ceased to be legal it became difficult to put a value on plantation land. The clampdown on land did not seem to adversely effect the original settlers in the pioneering phase (Finney 1973:48). A feature of plantation development, according to Beckford (1983) is under-utilisation of land on the plantation for where land is low in cost and the future reasonably bright planters will attempt to secure more land than they need or have the capacity to use. This was the way in which the coffee plantation industry developed also (Cartledge 1978:117).

The second main area of investment undertaken by white planters in the pioneering phase was, according to the BAE survey, investment in plant and machinery (12%), mainly in processing equipment. The amount of capital invested in machinery clearly depends on the stage to which processing is done on the production unit. Smallholders who sell cherry make no investment in processing equipment. Smallholders who sell parchment need to invest in a hand-operated pulper (costing currently about $A280) some concrete or wooden (but not steel) vats and blue canvas or plastic upon which to dry the seeds after fermenting. For a plantation, equipment must be bought for each stage of the
processing chain and housed in a separate building. Pulper, vats, driers, garers, polishers, baggers and drying trays must be provided. The initial outlay may be substantial, but the equipment is durable. At Erinvale, Jim Leahy's old property, most of the original processing equipment was still in use in 1982. However, the investment cost is not so much in the original purchase price of the equipment but in the fact that for much of the year - between harvest times - the equipment lies idle. A further problem is caused by what is known as the coffee flush, the regular tendency of Arabica coffee to bear much more heavily in alternative years. This means that provision of processing facilities has to be made on the basis of high yielding years. This can be an expensive and wasteful outlay, especially in colonial Papua New Guinea where most colonial plantations also processed smallholder coffee to export stage. This required each plantation to maintain a processing capacity far beyond the requirements of the plantation itself. A further unusual feature of the processing on plantations in Papua New Guinea is that most plantations had the capacity to process coffee to the export stage. This meant much over-provision of equipment, but control of processing was an important factor in raising plantation returns as well as in gaining a good deal of control over the industry itself. It is perhaps a testimony to the political strength of the planter class that the right to process to the export stage was never challenged by the Administration in colonial Papua New Guinea.

Plantation agriculture is capitalist agriculture for it is the process of putting labour to work with the means of production - land, machinery, specialised inputs such as fertilisers - to produce a crop for sale in a market. The intensive use of labour in production of high quality washed Arabica is not confined to the plantation preparation stage nor to specialist functions like processing. The planters' task is essentially what is 'commonly known' as management. Management involves the working out of arrangements whereby labour is combined with the means of production in the most efficient manner possible. Efficient operation does not necessarily mean reducing costs. In the production of a quality product some inputs cannot be curtailed.
In the case of washed Arabica production every aspect of production has intensive labour requirements including routine maintenance work, weeding and harvesting. Also each aspect of the production of washed Arabica has a quality dimension (unlike 'dry' production in Brazil) so that great care must be taken not to sacrifice quality for economy.

The growth of indigenous wage labour in the coffee industry has been fairly rapid since the first coffee was harvested in 1955. At that time some 2,000 indigenous workers were employed on plantations. By the late 1970's there were over 11,000 full time indigenous wage labourers in the Papua New Guinea coffee industry of whom at least 70% were employed on plantations. The increase is due to the establishment of more plantations after 1955 and to the fact that the demand for labour is greater as plantations reach the operating phase. The number of full-time labourers required on a plantation can vary depending on the soil, rainfall, land fall etc. However, an average workforce for a plantation of about 20,000 trees would be anywhere from half a dozen labourers in the slack season to two dozen or more at the height of harvesting (Finney 1973:150). Though the numbers of indigenous wage labourers in the Highlands have increased they do not constitute a social force in the industry. The theoretical reasons for this are offered in Appendix E. Consequently rural proletarians will not be treated systematically in this thesis as are other classes in the industry.

Most of the full-time labourers are employed in non-harvest times on routine maintenance work and weeding. Weeding is especially labour intensive in the coffee industry for, unlike crops such as cocoa, weeding in coffee has to be done throughout the year. Adequate weeding is essential for healthy plant growth in coffee. Weeds use up water and plant foods and can cause root competition which crowds out the coffee feeder roots. This can result in stunted growth and lower yields. As Wellman says,

one thing is certain, that good coffee growing will always require attention to weeding. If coffee trees are at proper spacings, with an adequate amount of sun, on good fertile soil, weeds will necessarily flourish. (Wellman 1961:198)
Weeds are usually removed by hand, either spaded out or slashed with a bush knife. The weeds thus gathered can then be mulched and placed around the plant. This has been shown to be good for yields no matter how good the fertiliser (Wellman 1961:201). Weeds can also be removed by chemicals (herbicides) but these need to be handled carefully by trained labourers. A large work force is still needed for hand weeding and mulching.

Pruning is a task that also needs to be carried out if high yields are to be maintained. Pruning is only done once a year on Papua New Guinea plantations. The recommended method, which most plantations have adopted, is the multiple stem method. This is a more economical method of pruning than the single stem method which requires much more attention and time for each tree. In Papua New Guinea,

pruning is generally carried out after the main crop harvest, say September-December period. A skilled pruner can prune 1/2 acre a day. (Department of Agriculture Stock and Fisheries, Territory of Papua and New Guinea 1970)

Thus pruning is not as labour intensive as other activities on the coffee plantation. The most labour intensive of all the activities undertaken on Papua New Guinea plantations is harvesting. This is particularly the case where high quality washed Arabica coffee is produced. The main reason this is labour intensive is that berries have to be picked when they are ripe so that they can be pulped. Once picked, the berries have to be processed within twenty four hours or they deteriorate. Picking is very slow and cyclical for, while coffee cherries ripen mainly during a short period called the flush, which in Papua New Guinea extends from April to August, they can continue to ripen in small quantities over many months (Papua New Guinea Coffee Industry Board 1980:8). Thus

pickers of quality coffee must return to the same tree time and time again to pick only the ripe cherries - an inordinate amount of labour for the two lb. of clear green beans which is an average yearly yield for one tree. (Roden 1977:49)
A modest level of human skill is required to identify and pick ripe as opposed to unripe berries, and little investment is devoted to developing it, though poor harvesting technique can clearly cause damage and waste.

The object of plantation agriculture is profit, an increase in monetary return and accumulation. Profit and accumulation are conceptually distinct. Unlike accumulation, profit can be realised at the level of exchange as well as in production. Profit can be realised in various ways such as reducing the relative cost of the means of production, increasing its relative efficiency, manipulating the market or taking advantage of market fluctuations. Profit is simple money return and thus can be realised without reorganising the relations of production. Accumulation occurs only at the level of production. Accumulation is a process based solely on the appropriation of surplus labour. Surplus labour is the excess value created in the course of the capitalist production process. Marx argues that this excess value comes from the fact that capital pays labour the amount socially necessary to ensure the reproduction of labour power, but in return has the right to consume labour power for a period well in excess of that needed to create its use value. It is the ratio of this unpaid labour time (surplus labour) over that part of capital represented by labour power (variable capital) which gives the rate of surplus value, the source of the capitalists profit and the true measure of exploitation. Accumulation is the process by which the capitalist attempts, through organisation and reorganisation of the production process and through reinvestment of the profits in newer and more efficient plant and machinery, to widen the gap between the amount paid to the labourer and the value of the product labour power produces.

The production of surplus value suggests certain definite forms of production relations. In particular, the production of surplus value requires the existence of a pool of labour though, contrary to Marx's famous dictum that capitalism presupposes the complete separation of the labourer from the ownership of the means of production, experience shows that labourers need not be
entirely free nor divorced from dependence on the household.\textsuperscript{18} The production of surplus value takes place within a production unit which combines labour with the means of production usually in some form of factory organisation with the aim of maximising the efficient use of all these resources.

Within this framework - the combining of labour to the means of production - Marx shows theoretically that there are two possible ways to increase the rate of surplus value in capitalist production, the production of absolute surplus value and the production of relative surplus value. The production of absolute surplus value is the most obvious and historically the earliest form of increasing the rate of surplus value. The production of absolute surplus value occurs when the capitalist aims either to extend the length of the working day or attempts to eliminate wasteful labour time through an increasingly sophisticated and complex division of labour (Taylorism). It can be shown that the proportionate increase in the rate of surplus value is large even when the actual time by which the day is increased is fairly small and even when labour power is paid its market value or above for this extra time (Kay 1979:46). But there are natural limits to the production of absolute surplus value i.e., the lengthening of the working day. Labour power is obviously also living labour so there are natural limits to the amount of time a labourer can work (the labourer must eat and sleep to renew labour power). Even when, in the course of a single day, spent labour is replaced with renewed labour power as in shift work, the production of absolute surplus value runs up against the natural limit that there are only twenty-four hours in a day. These natural limits have forced capitalists to attempt to increase the rate of surplus value by the production of relative surplus value, by increasing the intensity (or productivity) of labour during whatever time it is at work.

The two main ways in which relative surplus value can be produced is by putting labour to work with new and more efficient techniques embodied in complex machinery or through the development of new skills which act to reduce labour time (Kay 1979:46). Kay reminds us that in practice the distinction
between absolute surplus value and relative surplus value is blurred empirically, that these two modes of appropriation are usually combined in practice and that there exists great variety in these combinations from industry to industry (Kay 1979:51). In certain industries it may be that there are structural limitations to the adoption of new techniques such that the production of absolute surplus value dominates the combined mode while in other industries the production of relative surplus value will be the main way in which the rate of surplus value is increased.

To ensure profit, white planters in colonial Papua New Guinea were concerned to reduce the costs of production of which labour was the principal cost. Labour costs accounted for about 45% of total costs on plantations in the early 1970's (Densley n.d.:14). In the pioneering phase labour costs proved not to be a serious burden for the white planter because during this period most labour was contract or agreement labour and was paid at very low rates or not paid at all until termination of the contract. This meant a considerable wage saving over time for planters. In the early 1960’s however, planters had to contend with the emergence of a rural minimum wage. The minimum wage concept was formalised in The Report of the Board of Inquiry Investigating Rural Wages and Related Matters, April 1966 which recommended inter alia that the food, clothing, housing, fuel and other material components of the wage be retained and which resulted in a substantial increase in the rural minimum wage in 1967/68 (Table 9). The HFSA opposed the concept of a rural minimum wage. It argued that a minimum wage is actually a maximum wage because it puts a lid on wages (New Guinea Highlands Bulletin, October 1966). The minimum wage did however, offer planters some stability in their production costs structure. Also, the real test of the extent to which labour costs impaired planter fortunes is whether or not they were so high as to inhibit certain aspects of production. There is no evidence of this occurring for plantations in colonial Papua New Guinea and indeed the situation seems to have been that coffee prices have frequently been substantially greater than marginal harvesting costs resulting in the optimal response being to harvest the available crop (Ford 1978:37).
However the real problem white planters faced in the operating phase was not rising costs of production but the fact that accumulation in the industry, due to the plantation form of production and the nature of the coffee bean itself, could be realised only through the production of absolute surplus value and not through the production of relative surplus value. This is the case because most of the phases in the plantation production of high quality Arabica coffee cannot be mechanised. Haarer recommended that 'every possible use of mechanisation to save labour must be devised' (Haarer 1962:232) but there are limits to mechanisation in the high quality Arabica coffee industry. Nor can new skills be developed to reduce labour time. In weeding for example while some progress has been made in the use of new techniques such as herbicides there are limits to which these can be used, especially when the plant is young. In any case, the importance of mulching means that a great deal of weeding has to be done by the manual spading method carried out by unskilled labourers even where the plants are able to tolerate the use of herbicides. There seem to be few ways in which labour required for year round hand weeding can be intensified by combining it with machinery or developing its level of skill. Pruning on the other hand, does require specialist skills so that labour time can be saved in this activity if teams of specialist pruners are established solely for pruning. Pruning however is not a particularly labour intensive task so that labour savings made on this activity are not very significant for the plantation overall.

The main area where planters would like to use machinery to increase the productivity of labour is in the most labour intensive task of all, harvesting. Machines have been invented to harvest coffee but these are not suitable for quality Arabica coffee produced for taste, since taste is only fully developed if the cherry is harvested when ripe and processed immediately. Given that cherries ripen unevenly it follows that an assessment must be made at the point of harvesting as to whether the cherry is ripe or not. This assessment can be made only if the cherry is hand picked. No machine has yet been invented which can tell the difference in ripeness of various
berries even if it could get them off the tree without damaging them. In Brazil machines are used to strip everything off the tree at once, leaves, flowers, overripe berries, underripe berries, but this can only be done with poor quality coffees at a time of booming prices for it takes the mutilated tree two years to recover from this savage treatment (Roden 1977:49). It is also doubtful that the separation of cherries from leaves, etc., which is done fairly automatically in the 'dry' processing method used in Brazil, could be incorporated into the 'wet' method used for high quality Arabica. Thus, it can be stated fairly categorically that the process of producing high quality Arabica coffee on plantations is such that it is unlikely that increased mechanisation or the development of new skills can ever form the basis for extended accumulation in the industry.

The coffee planters' dilemma is thus easily stated. On the one hand, plantation production of coffee is extremely labour intensive and, on the other hand, planters' ability to increase exploitation of that labour is limited to strategies to extend the working day, i.e., to production of absolute surplus value. Coffee producers must employ a sizeable labour force but, due to the agronomic features of the plant itself, they are limited in their ability to appropriate relative surplus value. So it is through attempts to extend the surplus labour time via the lengthening of the working day that coffee planters have attempted to increase the rate of surplus value and therefore profits. The length of the working day during harvesting has been extended by paying pickers piece rates.\(^2\) This is a time-honoured strategy which is particularly successful in the Highlands where pickers are generally local village women or wives of the permanent labourers who see no need and have no desire to establish an agreement on what is a 'fair' working day.\(^2\) The aim of a piece-work system is to yield increased output, to lower cost of production because of the more effective utilisation of labour (less labour for the same output) and to raise earnings for employees. However, this is an idealised aim for in practice piece-work systems come up against social realities that stem basically from the antagonism between labourers and planters.\(^2\) For a start, trials undertaken in
harvesting at piece-work rates on colonial plantations showed that the cost of supervision of pieceworkers was about double that for day rate supervision and day rate payment. This was due to the temptation of some pieceworkers to forge or steal weight receipts, to lose their copies of weight receipts or to resort to destructive or careless practices to get the berry off the tree (New Guinea Highlands Bulletin, April 1965). 

In circumstances where the lengthening of the working day through piece rate payment proves unsatisfactory and where the production of relative surplus value is limited, there is only one other way in which the coffee planter can realise profit from changes made to arrangements at the level of production. This is to increase production output by reducing the amount of shade on the plantation. Shade trees are a vital part of the agronomic make up of the plantation because shade cools the soil, maintains soil moisture, depresses weed growth and keeps the coffee bush in a healthy state of growth. In the Highlands the principal shade tree now used is a species of Casuarina because of its nitrogen fixing abilities (Dick 1977:45). But just as shade depresses weed growth so too can shade depress yields. Yields can be increased by reducing shade. However, if Arabica coffee is to be grown in the Highlands with reduced or no shade 'it is necessary to carry out a thorough programme of chemical weed control and heavy fertiliser applications' (Kimber n.d.:2). Hence, there exists the potential for a trade off between reduction of shade and an increase in fertilisers and herbicides for the planter aiming to increase yields. However, it appears that the reduction of shade is only possible in the short term for in many places where it has been tried it has resulted after a period in die-back and debilitation (Haarer 1962:88).

Given all these limits to profit and accumulation at the level of production it is not surprising that white planters quickly realised that they faced only two main alternatives in increasing their level of prosperity. The first alternative was to go beyond coffee altogether and diversify their interests into areas where they could realise relative surplus value. The second was to increase profits at the level of circulation. This would
involve a degree of vertical integration and control of the coffee marketing chain so that profits could be realised in marketing and on produce produced at other levels of production such as smallholdings. Or, if profits could not be realised through appropriation of the surplus of smallholders at the level of circulation, then at least limits could be imposed on the extent to which the produce of smallholders would compete with the produce of planters. The success of either alternative would depend on the extent to which white planters could get state support and could mobilise as a class at the level of class relations. We will assess the success of white planters in these activities in later sections.

Smallholder Production

The class location of coffee smallholders in Papua New Guinea does not alter with independence. In class terms there is continuity of the poor peasantry and the smallholder form of production from colonialism to post colonialism which allows me to present at this point an analysis of the smallholder class location in coffee which is applicable to the entire period from the origin of the Arabica coffee industry in Papua New Guinea to the present.25 The coming of independence can alter - through changes to the form and function of the state and patterns of class domination - the reproduction strategies of the poor peasantry and the 'silent' class struggle in which they are engaged but it does not alter the production base of the smallholder. I show in this section that smallholder coffee production is characterised by rudimentary development of the productive forces and this has ensured that the necessary inputs to growing coffee - unskilled labour and land - can be provided from within the household. Leadership in smallholder coffee production was not necessary because coffee production (except for processing) required few new skills and hence did not disrupt the existing division of labour in the household. As Bernstein notes for African peasantry, smallholder production may have resulted in 'limited technical changes in production. However, this process involves fundamental social changes in the conditions of production and exchange in which most African producers are engaged' (Bernstein 1977:61).
Bernstein's general analysis is applicable to Papua New Guinea coffee smallholders because the main social change undergone by smallholder producers of coffee in Papua New Guinea is the simple reproduction 'squeeze' (Bernstein 1977:64). This 'squeeze' causes smallholder coffee producers to intensify commodity relations in the household. It occurs when more and more of the labour of the household is devoted to maintaining the supply of coffee to the market. Papua New Guinea coffee smallholders have been particularly vulnerable to this intensification of commodity relations within the household partly because the production and processing of coffee in the household requires an enormous amount of labour anyway and partly because the cost of production of household produced coffee has been rising.

On the eve of decolonisation in 1972/73 there were 45,560 indigenous coffee growers in Eastern Highlands province who had some 5,008 hectares under coffee. The area under coffee was quite small, about .11 hectares giving an average smallholder between 500-1000 coffee trees. Anderson, in fact, found in a survey of coffee smallholders that '... the average tree numbers for the three provinces was 530 trees of which 450 were mature and 80 (16%) of the total immature' (Anderson 1977:10).

The 45,560 indigenous coffee growers in Eastern Highlands in 1972/73 produced some 6,118 tonnes of green bean equivalent, which is approximately 140kgs or between 2 and 3 60kg export bags of coffee each. This is a very small volume of coffee per household. The cash return from coffee production to these producers in 1972/73 would probably have been around $45 per year or less. As Finney noted in the late 1960s smallholder coffee returns in Papua New Guinea do indeed provide '... a low per capita cash income, putting the Gorokans well down on any scale, even one that would include other underdeveloped countries of the world' (Finney 1973:68). It follows that for most smallholders there is very little spare cash to invest back into production so that production of coffee by smallholders is extremely rudimentary involving the most elementary and inefficient machinery (such as pulpers and hoes), limited or undeveloped techniques and unskilled labour. They rarely weed and almost
never mulch. Further, pruning is rarely done by smallholders. This causes lower yields, difficulties for pickers and a failure to rejuvenate the tree by providing bearing wood. Given the absence of shade planning and official DASF discouragement of smallholder use of fertilisers, the soil is fairly quickly exhausted by this type of coffee production (Dick 1977:51).

The household provides the two main inputs needed to grow coffee, land and unskilled labour. Coffee can be grown in a household unit alongside food production and in circumstances where migratory labour is sometimes withdrawn from the household. Coffee has thus fitted in with the existing division of labour internal to the household. Barnes, quoting Reay (1959), shows that the division of labour internal to Highlands households has always been gender-determined. Women do the less spectacular, more repetitious work such as pulling grass, maintaining subsistence food production and the care and protection and feeding of pigs leaving men free to build houses, make tools and exchange valuables (Barnes n.d.:268). Though women’s work is essential to the household’s survival and to the man’s prestige in the clan, women remain low in status and do not share ownership of the households wealth in pigs or benefit from exchanges.

This gender division of labour has barely altered with the introduction of coffee production into the household. Women continue to do the least skilled but most time consuming tasks (weeding and picking) ... [while] ... the tasks requiring some knowledge of coffee technology (planting, shading, fencing and pruning) are mainly men’s work (Barnes n.d.:274). This requires women to put in more time than men in both subsistence food production and coffee production. It suggests that coffee production in the highlands depends less upon the diversion of male labour from other activities, than upon the extension of women’s labour from food production (Barnes n.d.:275). The main point however is that the household does not have to drastically modify the internal gender determined division of labour in order to be able to be engaged in the production of coffee as a commodity.
Barnes shows that the internal division of labour has been maintained on a gender basis much as it was before the household began to produce coffee. This is partly due to the fact that household production of coffee required limited technical knowledge or equipment. But coffee is not only produced by smallholders it is also harvested and processed by them. It is these activities which link the coffee households into larger systems and forces changes in the system of household reproduction. In general terms two moments are involved in this process of linkage. The first moment is the monetisation of certain elements within the household. The second moment, where commodity production and preparation for the market is labour intensive, is the movement of domestic terms of trade against the household. This is the simple reproduction squeeze. The implication of the linkage of the household to larger systems is, that the production of coffee in the household has penetrated the natural economy, broken its cycle of reproduction and thus caused fundamental social changes in the conditions of production and exchange in which these smallholders are engaged (Bernstein 1977:61-62).

The monetisation of certain elements within the household, which produced a rupture in the cycle of reproduction of the natural economy, began in the Highlands with the imposition of taxes necessitating sources of cash income for the household. Cash was provided in the beginning by labour migration and later by the production and sale of coffee. But cash was also needed for coffee production even though smallholder production was limited in its technical development. Anderson (1977) found the cost of production among smallholders varied greatly depending on whether they employed labour or not. But even non-labour costs of production for coffee were not insignificant as a percentage of cash return from coffee and were higher where the smallholder processed the crop to parchment stage. Anderson found,

Smallholder coffee producers normally incur a small cash cost for the purchase of tools such as spades, knives, saws and bags, buckets, sheets of plastic and other items. The average amount spent on such items by growers actually incurring the expense was K6 per year.
In addition, growers may hire labour to assist them in the garden. Where this was incurred the cost averaged K18-40 a year. (Anderson 1977:21)

Some of these purchases (the tools for example) were items which were also used for food production, but bags and plastic sheeting were purchased so that parchment could be produced and stored. By far the largest fixed capital investment householders ever make is the Bentall pulper introduced into the Highlands in 1965 at a cost of K175 in the early 1970's (Good and Donaldson 1980:29). This is a major purchase the use of which has significant impact upon internal household production though not, as is often claimed, upon the differentiation of households. Today, in the Eastern Highlands the monetisation of certain elements within the household has reached a much more sophisticated level. Now cash is needed and desired mainly for consumption purposes. Grossman, who has recently and extensively observed and described village life in the Eastern Highlands, writes

Money is needed for many purposes - school fees, taxes, transportation, clothing and entertainment, and to purchase certain necessities and items of consumption which are part of the currently accepted standard of living. Village life is also intensely social and money is required to fully participate in many aspects of social life from beer drinking and gambling to certain pig exchanges and payments of bride wealth. 'Bisnis' activity has entered into the characteristics defining a man of respect and prestige, one held in esteem by his fellow villagers ... what is significant for the man of business is not so much the amount of money he makes though this may be important but that he is involved in 'Bisnis'. Not to be involved in any form of such enterprise invites the label of Baeh - Bainte or Rabisman in Tok Pisin, a person of no worth or consequence lacking in prestige. (Grossman n.d.:12)

Clearly, monetisation has proceeded very far when it influences social attitudes to such an extent.

Villagers have to maintain this level of consumption but their ability to do so is dependent on the price of coffee. As a hedge against falling prices, villagers have mastered the art of processing coffee to the parchment stage. This is a vital development in the industry because of the need for pulping
cherry within 12 to 24 hours of picking. Village processing grew from necessity because in the early days of the industry it simply was not possible to provide the facilities for transporting cherry from each remote smallholder to a central processing plant. The system of roadside buying, in which trucks driven by coffee buyers weigh and pay cash to growers waiting at the roadside (smallholders can also sell directly at the factory door) has alleviated this difficulty. Even where transport was available household processing of coffee to the parchment stage had its attractions because ‘... it was seldom possible to synchronise purchasing days with picking days as finely as this. Coffee parchment can be kept for long periods (as long as it is kept dry) and is much lighter and easier to transport than cherry’ (Donaldson and Good n.d.:152). But the real advantage of processing coffee to parchment from the growers point of view is that this gives the grower the ability to determine - either for reasons of price, transport needs or household requirements - the time of selling. The advantages of parchment are that it is a storable product, ‘so that it need not be marketed immediately and can be accumulated into large amounts so that large batches of income can be received. Where access to a coffee factory is cheap, cherry has the advantage of providing a quick cash return of a day’s harvesting. A grower can utilise both methods of selling’ (Anderson 1977:18).

Smallholders tend to opt for the sale of parchment even though there are substantial arguments against this course. These include the fact that a smallholder must somehow gain access to a pulping machine, that when conservation rates are taken into account in comparison with cherry, parchment is definitely not an economic proposition and also that processing is extremely labour intensive. Processing does have significant impact on the peasant household. It involves coffee smallholders in an intensification of commodity relations within the household. Smallholders process coffee to the parchment stage because parchment is a storable product. It can be released onto the market at a time which suits the smallholder. Processing thus offers the smallholder greater security. However, smallholders gain this control over the crop at the cost of investing an
enormous amount of labour in processing. Processing is not nearly as time consuming as harvesting but it does require labour time over and above that of sellers of cherry and it adds to the cost of equipment and thus represents a significant intensification of commodity relations for the smallholder household.30

Most processing is carried out during a four-month period between May and August. During this time, ripe coffee berries are picked and then processed in the evening of the same day. Picking and processing is not done every day in this four month period although Anderson found that a household with 400 mature trees would need to work about 31 days in the four months (Anderson 1977:31). The procedure begins with the pulping of the harvested berries. Anderson found almost all villagers operated a Bentall pulper. Only in three cases in the survey, all from Lufa village, was pulping done by the enormously tedious hand method of removing the coffee cherry skin by squeezing the cherry between the fingers (Anderson 1977:26). Where Bentall machines were used Anderson found the time taken at the pulpery was two hours. Water for pulping and for washing the cherry before drying must be at hand at the fermentary, and is frequently carried to the fermentary, involving extra labour time (Dick 1977:84). The next stage in the production of parchment coffee is the fermenting and washing of the coffee. Anderson found from 19 observations that an average time spent at each washing was 1.3 hours (Anderson 1977:27). A minimum of 3.3 hours is thus required for pulping, fermenting and washing on any one of the 31 days in the four months when the household is engaged on getting the crop out.

The above calculation does not include the hours spent on harvesting the crop during the 31 days. This is a very difficult and highly variable process because the conditions under which coffee is harvested vary considerably among smallholders. Coffee is harvested sometimes in a very informal manner, no records are kept and it is likely that even the most detailed study will show great variation among labour time spent on harvesting by smallholders. Despite this, calculations can be made about
harvesting. The aim being not to set down an average figure for smallholder labour time devoted to harvesting but merely to calculate roughly the commitment of the household in labour time to harvesting. Smallholders in the Eastern Highlands on the eve of decolonisation were producing about 140kg of green bean equivalent in gardens that were approximately .11 hectares. This amount of green bean equivalent is 200kg of parchment and 1,000kg of cherry at DASF recovery rates (Table 28). Thus the average smallholder had to harvest about 1,000kg in the 31 days spent on coffee during the four months of the harvesting period. The hours of household labour time invested in picking 1,000kg can be roughly calculated using adjusted figures from harvesting trials undertaken on plantations, where the base rate of harvesting for pickers on day rates is about 45.91bs (21 kg) each day (8 hours). For smallholders picking is immensely more difficult, and slower, because their gardens are not spaced out, their trees are not planted in rows, they have to cope with weeds and other trees and they may not have buckets and proper equipment. For these reasons, it would be optimistic to consider a harvesting base rate for smallholders as being any more than one quarter the plantation base rate. If this is the case a member of the household could not be expected to harvest coffee at a rate faster than 5.25kg per day. But it is evident that the household is harvesting approximately 32kg of cherry a day (1,000kg total in 31 days getting the crop out) so it seems that the household may be committed to having 6 people working eight hours a day on each of those 31 days to pick 1,000kg of cherry off the tree and ready for processing. This is a total of about 48 hours of harvesting a day to which the household is committed, making a staggering total of 1,488 harvesting hours required over the four month period of harvesting. We must add this 1,488 hours to the 93 hours previously calculated for pulping and fermenting and washing the parchment. We must also add the labour time invested in the sun drying of parchment, a process which takes 8 days. (Haarer 1962:271)

During this time 'some person needs to be about to turn the coffee to ensure even drying, be ready to take the coffee inside if rain threatens and to prevent theft' (Anderson 1977:27).

This work is usually done by village children thus the value of this labour is impossible and unnecessary to calculate for our purposes even though it is an important part of the process of
preparing parchment for sale. The final calculation that must be made is the labour time the household must invest in coffee production at non-harvest times of the year. Anderson calculated this to be about 8 hours per fortnight in the 8 months of the non-harvest period which would work out at approximately 128 hours. A minimum total for committed household labour to producing parchment would appear to be about

\[(1,488 + 93 + 128) = 1,709\] household hours annually for a smallholder with 400 mature trees on about .11 acres. This estimate is far higher than the only previously known calculation of annual labour time for coffee production in Sinasina undertaken by Hide who estimated that more than 2,000 hours per hectare were required annually for coffee production (Howlett, Hide and Young 1976:226). Could this estimation be inaccurate by a factor of 5? This is likely, for in at least one area of Hides calculations of labour time — that of non-household labour used in coffee production — Anderson found the estimates grossly inaccurate (Anderson 1977:31).

Returns to labour from smallholder coffee production are, as the Sinasina survey notes even for Hide’s labour time calculations, very poor indeed (Howlett, Hide and Young 1976:226). In 1972/73 it was estimated that the smallholder coffee household with 400-450 mature trees may have earned approximately $45 per year from the sale of coffee. But if the household is committed to invest at least 1,709 hours annually on coffee we find that the return to the household per hour committed to coffee is about 2.4 cents an hour, 17.2 cents a day or 86 cents a five day week. This certainly makes coffee production a non-economic proposition for the smallholder. If the smallholder has to hire outside labour to get the crop out then the household’s return from coffee production is even more dismal. It must of course be remembered that much of the labour invested by the household is, as we have seen, that of women and children and this labour would not be expected to realise a rate of return at a very high level. But equally it must be realised that the household is also dependent upon the labour of women and children. Their labour is absolutely vital if the household is to produce coffee at all and therefore it does have a value. It may be difficult to calculate
the value of this labour in monetary terms but the entire household is dependent on the labour of women and children for its reproduction and for the production of both use values (food) and exchange values (cash crops).

The low rate of return on labour invested by the household is important for another reason. This reason is that the household’s labour time when invested in coffee production is not only low but devalorised in relation to other uses of this labour time. This is mainly caused by the fact that it is peasant or household labour. The 1972/73 returns to peasant household production compare poorly for example with returns to hired labour paid at the level of the rural minimum wage. In 1972/73 the rural minimum wage was $4.27 (Jackson 1981:117) which is much higher than the above calculated returns for the smallholder. The smallholder was better off in 1972/73 to spend labour time in rural employment than in the production of coffee.

It is also necessary to emphasise that the intensification of commodity relations in the household, caused by the production and exchange of commodities such as coffee and the exchange of labour-power as a commodity, takes place in a unit where food is still produced for use by the household. Food production (use value) uses the same labour that goes into commodity production (exchange value). Another important feature of peasant households is the simple reproduction 'squeeze' of smallholder coffee producers which demonstrates that households engaged in commodity production have their labour time devalorised through the structure of peasant production. This means the distribution of labour time between use value production and exchange value production is difficult under even the least difficult household conditions. This affects the households response to cash needs because the household can and usually does purchase food in the market to subsidise household food production. A threat to the reproduction of households producing both use values and exchange values can occur if the labour time devoted to household production of food is suspended. The household depends on being able to balance the labour requirements of coffee and food.
production. However the intense demands of coffee for labour makes it difficult to maintain production of food. This has made purchased food necessary for reproduction.

The point of all this is to show that an explanation for the response of peasant households to variation in the price of a marketed commodity cannot be attempted without acknowledging that the household will consider a) the amount of food needed to be produced by the household, b) the amount of labour that goes into producing the marketed commodity as against labour time needed for food production, and c) the capacity of the household to purchase food. For example, the 'perverse' response by peasants to falling prices in the marketed commodity is possible because the household produces food for consumption. The household can thus reduce levels of consumption of purchased food and, if labour is available for food production, intensify production of coffee. There would seem to be no reason not to do this when labour devoted to food and coffee can be maintained and where outside purchases can be suspended. On the other hand, when prices of coffee rise the level of food purchases can be maintained while at the same time labour time devoted to either food production or coffee can be reduced. The choice for reduction between food and coffee would be coffee because as we have shown the labour component of coffee production is unreasonably high anyway. Hence, whether price variation is high or low the peasant response, if one assumes that peasant households produce only exchange values, might appear quite irrational but, viewed in the context of the distinctiveness of household production the peasant response can appear quite rational.

Evidence of the intensification of commodity relations in the household is the alteration of the balance between use value production (food) and exchange value production (coffee) so that households are required more and more to purchase food rather than produce it for themselves. The effect on food production of the intensification of commodity relations in coffee is as this section has shown merely one aspect of how the intensification of commodity relations internal to the household works to the disadvantage of smallholder producers. In later sections I
examine peasant production in relation to the social division of labour as a whole and show that coffee smallholder producers are forced to compete with production from plantations. Planters can, through control of marketing channels and with the assistance of the state, double or even triple the simple commodity 'squeeze'. This is done by devalorisation of peasant labour at the point of production and through an intricate set of controls and regulating mechanisms at the level of exchange as will be shown in later sections.

This section has shown that devalorisation of peasant labour time in production is a structural feature of household production of coffee and one that continually forces households to invest more and more labour for a minimum return. Peasant households are 'squeezed' not only in relation to labour but also in relation to that other major productive force which is needed for coffee growing, land. It has been argued that the growth of smallholder coffee production had slowed down after decolonisation because of land shortage (Draft Hansard, 17 August 1978, Post Courier, 19 October 1976). If this is so, then the smallholder has the choice of either producing less coffee or alternatively, as Dick argues, devote more attention to maintaining higher yields on land already given over to coffee production (Post Courier, 19 October 1976). This will involve further regeneration and maintenance of older trees at the cost of more and more labour devoted to coffee production. This will raise even further the costs of production. The situation is such that smallholder coffee producers must face the reality of greater and greater commitment of labour to coffee production where labour is devalorised in relation to alternative uses of labour time while their costs of production due to land shortage are rising. It is little wonder that smallholder coffee producers in the Highlands complained to Grossman that '... coffee imprisons us' (Grossman n.d.:4).
The future of white coffee planters in the colonial period in Papua New Guinea was not a secure one. Planters did well and many prospered in the early years of the coffee industry but their fortunes declined throughout the 1960's and by the time of Independence (1975) most white planters had been replaced by nationals or had succumbed to corporate takeovers of their plantations. The reason for this change is to be found both in the distinctive nature of plantation coffee production which, as we have seen, imposes limits on accumulation by coffee planters and in the social relations which existed in the colonial coffee industry of Papua New Guinea. The simple fact is that white planters could only establish secure class boundaries in the coffee industry outside the realm of production.

The study of class boundaries is a study of class relations. The foregoing identification of the amorphous location of classes tells us little about the organisation of power or domination in the industry. To know this it is necessary to analyse the relations between classes. In this section I analyse the first moment of class relations, class relations (objective) in the colonial coffee industry of Papua New Guinea. Class relations (objective) is the moment when antagonism between contending classes within a sector takes the form of the objective siting of boundaries between these classes (or between related class fractions and social categories). Ownership and control of the means of production is obviously an important factor in this siting for, without a sense of separate locations, there would be no need for boundaries at all. I have shown how in the colonial coffee industry a study of the ownership and control of the means of production led to the identification of two main classes, a class of white planters, and a class of smallholders. Once the ownership and control of the means of production is established, however, other factors such as market relations become important in establishing class boundaries.
In this section I will show how the planters were successful in achieving a degree of vertical integration in the coffee market through normal commercial activity. Their strategy was to control the main pinch points in the coffee marketing chain - the exporter, processor and coffee buyer pinch points - so that they could profit from the value added to smallholder coffee which flowed through the pinch points. However, the boundary setting problems of planters were not solved by their gaining control of market pinch points. This control gave them profit but it did not give them extensive power in the industry. The coffee industry of Papua New Guinea in this period was an expanding colonial industry. This meant that a group of large national growers soon emerged who did not fit the neat class boundary division into planters and smallholders and who could not be accommodated within the class boundaries set by the market structure. To reduce this perceived threat, white planters adopted a program of incorporating leading national growers to adopt the interests of the planters through a middle peasant strategy. The failure of this strategy demonstrated the limited power white planters had in the industry and showed them that the only way they could secure and extend their class boundaries in the industry was through a level of market manipulation which could only be achieved with assistance from the state.

Exporter Pinch Point

Foreign and white planter dominance of colonial coffee marketing can be shown by uncovering the planters' role in the operation of the various stages of marketing and especially their control over pinch points in the marketing chain. These pinch points are crucial class boundary markers defining the space occupied by the various classes and representing prizes to be won or lost at the level of class relations (subjective). Pinch points are not always 'market' points for, where there is a high level of state involvement in class boundary setting (as in many African countries), they may be points inside the state or at least points whose class effect is mainly administratively determined. We can identify three major pinch points in the colonial coffee industry - at the exporter level, the processor level and the
coffee buyer level. These are presented in Figure 1. This figure also shows the factor which makes each pinch point a crucial class boundary marker in the coffee industry and identifies the class which controlled that pinch point in the colonial coffee industry of Papua New Guinea. I will take each of these pinch points in turn.

In the coffee industry of colonial Papua New Guinea there were five main exporting companies all foreign owned (and mainly Australian owned) trading companies. These were ANGCO Marketing Pty Ltd, Gollin and Co. Ltd, Harrisons and Crosfield (ANZ) Ltd, E. Singer Pink and Co. Pty Ltd, Peter Jackett and Co. Pty Ltd. Some of these exporters were also roasters while others were merely engaged in trade, providing cargo for their ships on the return journey to Sydney. The five exporters formed a voluntary organisation called the New Guinea Coffee Agents Association and maintained offices and agents in the main coffee export ports (Madang and Lae). The main destinations of New Guinea coffee were Brisbane, Sydney and Melbourne and a small amount went to Europe. The purpose of the agents' cartel was to restrict competition at the export level as well as to lobby the metropolitan state for special tariff concessions for access for Papua New Guinea coffee (see class relations subjective, below). The cartel also enabled the exporters to present a united front in Papua New Guinea to the Administration.

How did the cartel operate to benefit its supporters? It charged different rates for agents' services so that uniform price setting appears 'not to be a feature of the cartel' (Bureau of Agricultural Economics 1961:65). The New Guinea Coffee Agents Association was 'supported by most members of the Highlands Farmers and Settlers Association (HFSA) and native producers as well as the Administration' (Bureau of Agricultural Economics 1961:63). Though there is no evidence of the New Guinea Coffee Agents Association using its cartel power to artificially raise the cost of transportation it did benefit from its control over this pinch point. This can be shown in an analysis of the cost structure of exporting coffee from colonial Papua New Guinea. The cost of marketing coffee from plantation to the buyers' store
in the country of destination (Sydney was the principal
destination at this stage) was close to 6\(^d\) per lb.\(^{35}\) 'This was
at a time when coffee was returning 4/2\(^d\) per lb in Sydney and
smallholders were being paid between 1/6\(^d\) and 2/3\(^d\) per lb for
parchment in Papua New Guinea. The 6\(^d\) per lb cost of marketing
coffee from plantation to the buyers' store in the country of
destination was made up of the following charges: a) 1\(^d\) per lb
for internal air freight from the Highlands airports; b) 1.5\(^d\) per
lb for port and shipping costs at territory ports; c) 1.5\(^d\) per lb
for shipping freight on coffee from Lae and Madang to Brisbane,
Sydney and Melbourne; d) .5\(^d\) per lb for bank exchange and
insurance; e) 1.5\(^d\) per lb for standard costs at the port in
Sydney (Bureau of Agricultural Economics 1961:68).

This breakdown of the marketing costs gives some idea of the
complexity of the marketing chain for coffee. This complexity
played a big part in the argument usually offered on behalf of
the whites that they should dominate the marketing process
(including the marketing of smallholder coffee) because the local
marketing system was built up by the settlers and only they had
the equipment and know-how to bring coffee to its port of
destination (Finney 1973:54). A significant aspect of this
complexity was the extraordinary situation whereby all coffee
produced in the Highlands was taken to the port at Lae or Madang
by DC3. This was a comparatively cheap system of internal
marketing (1\(^d\) per lb for a fully loaded DC3 holding 3 tonnes).
There was anyway no alternative because until the construction of
the Highlands Highway in the mid-1960's the road from the Eastern
Highlands to Lae was not trafficable for regular transport,
especially between the Markham valley and Kainantu. Even today
there is no trafficable road between the Highlands and the port
at Madang. But internal marketing by DC3 could only be kept
relatively economical when very large cargos were freighted. BAE
reports that the cost of internal marketing by DC3 doubled if the
planes could not be filled (Bureau of Agricultural Economics
1961:66). This situation totally precluded smaller indigenous
entrepreneurs from becoming involved in internal marketing in a
way that marketing by road transport would not. The marketing
structure from plantation to territory port ensured white planter
dominance over this stage of the marketing chain. This dominance was enhanced also by the fact that white planters often had financial linkages with exporters and vice-versa and white planters entered into contracts with exporters to deliver to them a certain volume of coffee. Such an arrangement ensured for planters that their coffee would be exported and ensured for exporters that they would have a supply for overseas buyers. At the same time it discouraged both planters and exporters from deviating from contracts and established clients. In this way, competition in internal marketing was further discouraged. White planter dominance over this stage of the marketing chain was further enhanced by the fact that the grower had to bear the full cost of the delivery from plantation to the buyers’ store in the country of destination (Bureau of Agricultural Economics 1961:63). This required considerable resources and access to credit as planters waited for payment from exporters. It was a cost that neither native growers nor native entrepreneurs could bear.

Processor and Coffee Buyer Pinch Points

Foreigners and white planters also retained control over processing factories and thereby dominated the market structure at this pinch point. Most of the processing plants in Eastern Highlands were set up in colonial times initially to process plantation coffee but also to hull smallholder coffee. In the Eastern Highlands European plantations usually possessed their own coffee mills or had their coffee processed in mills with which they were financially associated (Finney 1973:160). Control of processing was important for it virtually guaranteed the processor control over the smallholder crop. Without access to a privately-owned milling factory, smallholders were unable to get their coffee hulled. Smallholders were faced with the option of direct or indirect delivery of their cherry or parchment to the processing factory. Direct delivery was available to those who lived within close proximity of the processing factory. Those smallholders who could deliver cherry to the processing factory had to live very close to the factory as the cherry had to be processed within 24 hours. Smallholders who were some
distance from the factory and who were prepared to process parchment could store it and deliver it to the factory door when transport was available or when the price was right. The advantage of delivery to the factory door from the smallholders' view was that daily changes in coffee prices were posted on the factory wall and the smallholder could be sure that the price offered was the correct one.

The smallholder in Papua New Guinea also had the option of selling parchment or cherry indirectly to the processing factory through a possibly unique pinch point - a system of roadside buying. Little is known about this in either the colonial or post-colonial period, for it is subject to immense variation. Simple observation of the process of roadside buying and selling suggests that it is a highly arbitrary process. The system works fairly simply based on individual buyers with access to cash for buying coffee, a truck and a weighing machine. These buyers drive around the Highlands and offer to buy cherry or parchment from villagers waiting at the side of the road with their produce. The buyer will inspect the bag or bucketful of produce for quality, weigh it and offer the smallholder a price. The smallholder will sell or not sell depending whether the price is thought to be reasonable. There are many factors which affect the price that is offered to smallholders and one cannot generalise as to whether the price offered by a roadside buyer is fair or whether smallholders are justified in refusing, as they frequently do, to sell to the buyer. Among the factors that will cause price to vary from one roadside transaction to another is the distance and difficulty of access of the site of the transaction from a major centre or processing plant, the degree of competition among buyers in the locality, the buyers' and smallholders' canniness and the variation from day to day, month to month, year to year of advertised prices and ultimately of the world price (Howlett, Hide and Young 1976:232).

There are two structural features of the system of roadside buying which caused it to become a significant political issue in post-colonial Papua New Guinea, which I examine in much greater depth. The first feature is that roadside buying offered one of
the few commercial activities in the coffee industry that indigenous people could enter into apart from coffee growing itself. Thus it has always been a very sensitive issue among Papua New Guineans and one which is politically controversial. The second feature is that coffee buying can require a fair amount of financial backing, cash to purchase smallholder coffee as well as finance for a truck, etc. It also requires a surety that the produce the buyer brings in will be processed at the factory - and if it is cherry it has to be done more or less immediately - and that the buyer will not be turned away due to maximum utilisation of the factory. This feature has usually meant that the buyer has entered into a financial arrangement with the processor who will provide the financial backing and guarantee processing of the buyer's haul. 'Prior to 1974 most roadside buying of coffee was undertaken or controlled by overseas companies, most of whom also operated processing facilities' (Densley n.d.:20). In this way processors managed also to control the coffee buying pinch point in the marketing structure.

Control of processing and coffee buyers enhanced white planter control over smallholder coffee for they were able to make substantial profits from processing smallholder coffee. Given the restriction on expansion of European plantations this was an important source of extra income for white planters. It also advanced white planter accumulation through investment in processing plants. However, the fact that it was profitable to invest in processing reinforced the existence of two different forms of production in the coffee industry, because white planters then invested in processing commodities produced by smallholders rather than undertaking the production of these commodities themselves. White planter control over processing allowed planters to engage in what Bernstein (1977) calls 'vertical concentration' of smallholders which refers to the co-ordination, standardisation, and (greater or lesser) supervision of the production of numerous individual small producers through a central agency [in this case a central mechanism] ... (which) represents productive capital directly. (Bernstein 1977:70)
In the colonial coffee industry of Papua New Guinea this mechanism was a grading system which certainly was introduced originally as a mechanism for quality control but which had the effect of further devalorising the labour of smallholder producers by further reducing the price paid for peasant coffee.

It is not an easy matter to show that processing the smallholder crop was a profitable venture in the absence of audits and taxation figures for colonial processing factories. However, it is clear that processors continued to process smallholder coffee so they certainly considered it an economical proposition even if it was not a highly lucrative one. It can be shown that the returns to a processor of processing smallholder coffee were not greatly different to the returns accruing to a planter who produced and processed the crop. Given that the processor of smallholder coffee did not have to pay the costs of production it may even be that the rate of profit from processing smallholder coffee was higher than that realised by the planter-processor. We can use the figures presented from the BAE Report (1961) above to get some idea of the return to the processor from processing smallholder coffee. At that time a pound of coffee was returning 4/2d in Sydney of which 6d per lb was the cost of marketing coffee from the plantation or factory door to the buyer’s store in the country of destination. Coffee was worth 3/6d per lb at the factory door. At the time, the smallholder was being paid between 1/6d and 2/3d per lb for parchment. The conservation rate for parchment to green bean (smallholder) is 1:.7 so that 1 pound of parchment produces only .7lb of green bean after processing. Point seven pounds of green bean would be worth approximately 2/9.5d at the factory door at prevailing rates. The margin between what the smallholder is paid for parchment and the value of that coffee at the factory door is the return to the processor which includes profit margin as well as costs, interests on capital etc. This margin is 1/3.5d - 6.5d per lb.

What of the costs, interests on capital etc. per lb borne by the processor? This would be a fairly low figure. For a start, the parchment has already been pulped, fermented and dried which are the most labour intensive parts of the processing operation. All
the processor need do is sort, dry, hull, dry again and bag the coffee. The hulling and initial drying is done by machine and is not labour intensive. Further, processing machines have a long life so interest on capital and depreciation costs would not be high. A maximum figure for cost of processing would be $1.5^{d}$ per lb. Thus the profit margin of the processor of smallholder coffee would probably be between $5^{d}$ and $1/2^{d}$ per lb.

What of the profit realised by the planter-processor? The BAE provides an average breakdown for 30 colonial plantations covered in detail by the BAE survey (Bureau of Agricultural Economics 1961:36). The average yield for the 30 plantations was 1,150 lbs of green bean. The average return to the operator after all operating costs had been extracted was £68. This is a return of approximately $1/2^{d}$ per lb. Thus, depending of course on the price paid for parchment, it was sometimes possible to have a return per lb on processing smallholder parchment equal to the return on the growing and processing of plantation coffee.

White planters managed in conjunction with the Administration to standardise and co-ordinate the production of the numerous smallholders by imposing upon them a system of grading. There is nothing unusual about a system of grading for agricultural products. Almost all agricultural produce has a system of differentiation in terms of quality so that a product of a desired standard should find its correct market. Grading systems are usually viewed as non-discriminatory, quality control mechanisms which are especially important where the product is produced for an overseas market. In many cases, this is precisely how grading systems function. Quality control was stated as the reason grading was adopted in the colonial coffee industry of Papua New Guinea. Cartledge writes,

as a principle, grading systems help to co-ordinate and to relate production with market demand. Aims of government trade policies include facilitating exports and in this connection a major component is the establishment and enforcement of export standards. Statutory export standards or grading, which are maintained on many agricultural commodities, contribute to a reputation for quality on overseas markets and
assist marketing... A government function is to provide and maintain minimum standards, promoting the level and value of exports. (Cartledge 1978:157)

However, grading systems are also linked to internal price. This simple connection can give dominant classes a potential lever over subordinate classes and a means to maintain control of the system of production. Whether a grading system works mainly to enforce quality standards (as presumably the Administration intended) or to reinforce an industry structure which is unequal (as would suit planters) depends on whether quality controls are applied indiscriminately upon all coffee produced and whether such controls actually work to ensure a raising of quality.

The grading system adopted in the coffee industry of colonial Papua New Guinea was based on a two step process. A first step was the establishment of grades that applied at coffee auctions. The aim here was to differentiate coffee according to whether whole beans were required for roasting and thus were of suitable bean size and appearance or whether beans were required for instant coffee manufacturers hence appearance was not so important (Shand 1972:193). Plantation produced coffee was generally thought to be most suitable for roasting and was graded according to size and appearance as A, B or C (A was the highest quality). Smallholder coffee was thought to be suitable for sale to instant coffee manufacturers. This system was translated into a system of internal quality control and price setting in the second step of the grading process. It is the internal grading system which plays a role in setting class boundaries inside Papua New Guinea so it is this system I will concentrate on.

The internal grading system divides into two sections, grades for green beans at the point of sale to the exporter and grades for the sale of parchment. There are three main grades for parchment, Grade X - highest quality, Grade Y - defective parchment that has been either over-fermented or has suffered from damp storage, has not been washed properly or has been ripped in the pulping process. Triage is the third level of parchment which is grossly inferior quality parchment (Department of Agriculture, Stock and Fisheries 1970:5-16). Quality control
of the smallholder crop can be exercised through the grading for parchment (X, Y, and triage) at the point of purchase either by the roadside buyer or at the processing factory door. The control of quality of green bean is exercised at the point of sale to exporter. The assumption in the colonial system of grading was that plantation green bean would leave the processing factory as A, B, C etc. to be purchased by roasters while green bean derived from smallholder parchment would leave the processing factory to be purchased by instant coffee manufacturers.

Is this, in fact, how the system has operated? Perhaps, though it is a loose system. It is the processor/planter who bags green bean and grades it. But is it always the case that smallholder coffee once processed into green bean must always be graded at an inferior level and therefore be of interest only to instant coffee manufacturers? Might it not be possible that after processing, some X and Y parchment might be suitable for grading as A or B green bean? There would be economic incentives for the processor to grade coffee in this manner because the price paid for high quality coffee for roasting is higher than green bean sold for instant coffee. The exporter checks the coffee and ensures that green bean labelled A and B is of that standard but the exporter has no interest as to whether the origin of the coffee was a plantation or smallholder unit of production. There would seem to be few limitations to the processor/planter selling A, B graded green bean which is derived from X, Y parchment and from smallholders. If quality was the main criteria upon which a grading system operates then it should be the case that the assumption that plantation coffee was in all cases the most suitable coffee for sale to roasters and that smallholder coffee was suitable only for instant coffee production would be regularly overturned as the quality of the coffee from both plantations and smallholders rose and fell periodically. The actual organisation of the production unit where coffee was produced would be less significant in grading than what a close inspection of the actual quality of the coffee revealed. The problem with the type of system operating at the level of processing is that if smallholder parchment of X, Y grade was
actually processed into A, B green bean, there exists no mechanism to recompense the smallholder who sold the parchment at the X, Y parchment rate on the basis that it would produce the lower price green bean. In other words, the processor could make a windfall profit if the quality control mechanism were to operate at this level only.

The point where smallholders could receive some recompense for high quality production is at the point of selling parchment at the factory door or to the roadside buyer. Here the choice is between the higher quality X grade parchment and the ill-sorted perhaps over-fermented Y grade parchment. The smallholder who sells parchment at the factory door can have it inspected for quality. Most evidence suggests however, that this is not possible where parchment is sold to roadside buyers. Casual observation suggests that buyers know little about quality, test for it in a casual fashion or not at all and assume all roadside coffee is Y grade coffee and pay accordingly. This suggests that the main criterion for buying much of the smallholder crop especially at the roadside is the structure of the production unit rather than the actual quality of the parchment presented for sale. Smallholders are continually exhorted to improve the quality of their crop but if they are always to be paid at the Y grade level then where is the incentive to do anything about quality?

This study of grading at the level of processing and at the level of purchasing parchment cannot be taken to have shown conclusively that the grading system for coffee in the colonial coffee industry of Papua New Guinea was an artificial construct designed simply to profit the dominant planter class. But an examination of the relationship between quality and the production unit does show that arguments about quality control are very often not about quality at all, or even about profit, but about control of the industry marketing structure. The grading system ensures a concentration of smallholder coffee at a level of reduced prices compared to that of plantation coffee. It allows the dominant class to conflate unit structure with price structure whether or not the actual product deserves to be
discriminated against on the grounds of quality. In this process, the dominant class has imposed a squeeze on household production beyond the simple reproduction squeeze because the quality argument allows peasant labour to be further devalorised through a price discrimination mechanism. The fact that this is done at the level of circulation, and presented simply as a question of quality control, makes the devalorisation of household labour less obvious and therefore easier to accept.

The Failure of the Middle Peasantry

The white planters soon found as a result of the expansion in the industry that they had to devise a strategy for those who did not fit the neat class boundary division into planters and smallholders and who could not be accommodated within the class boundaries set by a market structure. This new group were advanced local coffee growers. The white planters attempted to establish a new class location in the industry by sponsoring the formation of a Middle peasantry. The HFSA began sponsoring in the early 1960’s certain local Papua New Guineans, 'a new elite' who were encouraged to go into coffee production on 'middle income' properties, small plantations of about 35-40 hectares. The idea of sponsoring locals in this way was first suggested by Ian Downs in 1954/55 when he was district commissioner in the Eastern Highlands district. Downs wrote,

> the idea of Partnership is not new but the means and circumstances of creating a genuine and sincere partnership between Europeans and natives seldom exists. This is probably the only place in the world at the present time where the circumstances actually exist for sincere partners to be created. (Quoted in Finney 1973:49)

Europeans decided to assist selected 'natives' to produce coffee and through the demonstration effect ease certain 'natives' into advanced unit production.

Different accounts of this process are offered by Finney (1973) and by Good and Donaldson (1980). Finney shows how partnership worked in some cases (Finney 1973:55) though in many cases he argues it was less European sponsorship which got indigines
started in business and more the fact that native entrepreneurs manipulated traditional structures and relations, which Finney argues were preadapted to capitalism. In Finney’s account the importance of the idea of ‘partnership’ stressed by Downs and other leading planters is somewhat reduced. Good and Donaldson (1980) do not reduce the significance of the partnership process in their account but they argue that partnership was a wholly malevolent process, carried out in the planters’ own interests, although it did produce a rich rural class. The outcome of ‘partnership’ according to Good and Donaldson was a widening of class inequality in the Highlands. Each account adopts a very different framework and the arguments are different but both accounts tend to treat the new class as an undifferentiated category, as a business elite or a rich rural class.

Both analyses miss the crucially important fact that some elements in the new sponsored ‘elite’ missed getting into business ventures which would be endurable and hence some did not gain real power in the post colonial period. In fact, there were at least two different paths dominant class formation might take as a result of the expansion of the coffee industry in the late colonial period. One was sponsorship of small or medium sized plantations along the lines of the HFSA model and another was business activity – private ownership of trade stores, trucking businesses, influential positions in co-operative societies or savings and loans societies – all activities which were related to the fact that the Highlands money economy was dominated by coffee.

Each of these paths and the important difference between them can be illustrated by drawing upon the empirical material gathered by Finney on business leaders. The sponsorship of Papua New Guinean into ownership and/or control of a medium sized plantations took many forms. Some like Baito Heiro were personal servants or foremen of white planters (Finney 1973:55). They were established on land belonging to their own village and closely assisted and supervised in the care and operation of their own plantation by the planter for whom they worked. Others, like Bono Azinifa were big-men who had had contact with whites as
personal servants during the war and were well placed to draw assistance from both the clan - in the form of unpaid labour - and from Europeans (Bono followed the advice of a European settler who had helped to gain land near Bono's village on planting and establishment of a nursery). Bono owns the Kesa plantation of some 75 acres (Table 11). Still others like Sinake Giregire left their clan areas as children. Such men usually began a series of Europeans jobs and Sinake worked at everything from a mechanics helper to operating a business based on a hand operated pit-saw to gold prospecting before returning to the village with money to establish a coffee plantation. Sinake had shown he could be successful in European business and this encouraged his clansmen to allocate him a large tract of land. He still operates this land. It is called Yan Owa plantation and it is some 80 acres. A further way to become established on a middle income property was through some connection with the colonial state. Such connection could help in obtaining land and this gave many of the 'new elite' a start. Of Finney's ten big businessmen for example, two had been Luluais - government appointed officials in the village - two had been workers on the Aiyura agricultural station and one had been an agricultural assistant working with DASF extension patrols. Presumably knowledge of coffee growing plus an understanding of how the state operated and how the extension system worked helped these businessmen into coffee. The colonial state connection was not however, a guarantee of success in the Highlands because much of the production in the Highlands was private and did not require DASF involvement. This was very different from other areas of Papua New Guinea where there was little private enterprise and where production as well as marketing had to be undertaken by the state. In the end, very few government officials such as Luluai's or government employees actually got started in coffee (Finney 1973:91). By the mid-1960's, when the Coffee Marketing Board had been established, DASF was virtually irrelevant as an economic mobiliser in the Eastern Highlands.

The experience of those who moved into middle income plantations to grow coffee in Eastern Highlands contrasts vividly with another group, a budding petty bourgeoisie who in the 1960's
began to establish a base in the embryonic service industry around Goroka. The best known story of such a person is that of Hari Gotoha as described by Finney (1973:104-107). Hari established one of the most profitable and diverse Gorokan-owned commercial organisations in colonial Eastern Highlands. Hari’s business partner was his senior clansman, Soso Subi who became associated with Cottle, a DASF officer. Soso learned to grow coffee and established a medium sized plantation. Soso’s plantation, which was really a plantation for the Asaroyufa people provided the Gotoha-Subi partnership with its coffee base. However most of their capital was invested in service industries such as a supermarket in Goroka town, a restaurant and two heavy duty trucks used for local and long haul work (Finney 1973:105). Trucking businesses and trade stores were among the service businesses most favoured by Gorokans like Hari because they gave a quick return on capital which could be reinvested. Another businessman who began in the service industry rather than coffee - and who later became a partner of Hari’s - was Auwo Ketauwo. Auwo along with others, such as the present premier of the Eastern Highlands, James Yanepa, got their start in the 1960’s not through coffee or even through private commercial activity such as trade stores and trucking but through the new institutions, Co-operative movements and Savings and Loans societies. A base in these institutions gave these men access to credit which they used, sometimes in an extra-legal fashion, to acquire trucks or trade stores. It was only much later in the late 1970’s that such men began growing coffee on a commercial scale. Finney has been at pains to reveal that behind these budding petty bourgeois businessmen there was ‘a strong clan element’ (Finney 1973:106). Of Hari’s venture he writes,

some money pooled from the Asaroyufa people had apparently been invested in one or more of the enterprises. In addition, the very location of Hari’s store and restaurant on Asaroyufa land and the fact that money derived from the sale of Asaroyufa land and the sale of coffee from Soso’s plantation (which, as we have seen, was partially built up by clan labour) had gone into financing the investments meant that in a sense the Asaroyufa people could regard the businesses as part of the general resources of the clan, rather than the strictly individual enterprise of one or two of their number. (Finney 1973:106)
The fact that the clan 'could regard' Hari's enterprise as their own is surely irrelevant if they have no power to expropriate his business or at least make plausible threats to do so. Unlike those moving into the production of coffee on middle income properties, the budding petty bourgeois businessmen were not only less tied to the clan and therefore freer to develop on the basis of profit but also more independent of European planters.

The contrast between the structure-in-production of those who moved into middle income properties and therefore became middle peasants and those who moved into service activities is fundamental to understanding the process of class formation and much of the politics of colonial and post-colonial Eastern Highlands. The key difference emerging out of these two different structures-in-production, i.e., middle peasant coffee production and petty bourgeois business is the degree of autonomy each class had in colonial times from other classes in the colonial coffee industry, namely the dominant class of white planters and the subordinate class of smallholders. Class boundaries between these new classes and the existing classes are set by the structure-in-production. In what follows I argue that the middle peasants in coffee production had very little autonomy because, in the important areas of control of the productive forces (land and labour), access to investment capital and control of marketing, they were almost wholly dependent on existing classes and thus unstable as a class themselves. A study of the structure-in-production of the petty bourgeoisie shows, as we will see, that this class had a good deal of autonomy from other classes and therefore a much greater chance to develop as a class.

From the beginning, the middle peasants were dependent upon white planters if their plantations were to be a commercial success. Their dependence was partly due to the fact that their plantations were very small in comparison to European holdings. This usually made it non-economic for them to engage in processing beyond the parchment stage. The middle peasants had greater overheads than smallholders. They could not afford the security that processing offered as a hedge against market prices.
if it also meant an economic loss. Thus the middle peasants proved even more vulnerable to control by white planters through the marketing structure than smallholders.

Also, middle peasants were limited in the expansion of commercial activity due to the fact that for most of the 1960's credit was not available to them. This was because they could not present their land as collateral. The setting up of the Development Bank in 1967 hardly altered this situation because over the decade 1968/77 the loans and advances of the Development Bank totalled K71.7m but of this amount only K1.1m (or 1.53%) was allocated to the coffee industry which included both plantations and smallholders (Lam 1984:181). Where credit was available to Papua New Guineans this was rarely for non-agricultural purposes. Thus the middle peasants at the level of production remained locked in an unstable form of production. Production was unstable not because the scope of the production unit itself was inappropriate but because its survival depended on other strata of the peasantry (clan members or smallholders) and upon other forms of production (white planter processing of the middle peasant crop).

The dilemma of the middle peasants was that while their class location was similar to that of the smallholder in that land and labour was supplied from within the household, the class relations in which the middle peasant was enmeshed were more like those of a planter. The problem for the middle peasant was that the autonomy which should have flowed from household reproduction was undercut by the size of the production unit which limited middle peasant options and forced them into a dependent marketing structure. Their plantations were not large enough, however, to generate surpluses which would allow them to seize control and command the external network upon which they depended. Thus middle peasant reproduction was more problematic than either smallholder or white planter reproduction. This, of course, suited white planters who were aiming to incorporate advanced Papua New Guineans into the existing system. The planters, in their paternalistic way, considered that the establishment of a middle peasant plantation was in itself a major achievement for a Papua New Guinean.
The budding petty bourgeoisie however suffered few of the difficulties of the middle peasantry in terms of ensuring class stability. This was because the budding petty bourgeoisie had, through the nature of their enterprises, broken the nexus between household control of the productive forces and production relations. The budding petty bourgeoisie certainly used assistance from the clan when they could get it but the clan had no call upon trucking businesses or restaurants as they did where production required the use of clan land and clan labour for coffee growing. The petty bourgeoisie were also fairly free from white planter dominance. The marketing structures into which the petty bourgeoisie were integrated were often particular to indigenes and not under expatriate control. The petty bourgeoisie would of course have appreciated access to investment funds but this was difficult to achieve. Nevertheless lending patterns show that after 1967 the Development Bank tended to lend more easily to petty bourgeoisie activities such as trucking businesses than to middle peasant production units. As a result of the much greater autonomy at the level of class location and class relations (objective) the petty bourgeoisie was not politically active in colonial Papua New Guinea. It had no need to be. It was only in the early 1980’s when the process of class formation had dramatically altered in the Eastern Highlands that the petty bourgeoisie was forced to enter politics indirectly to defend its class boundary.

The colonial coffee market was structured in the interests of white planters. White planter class boundaries were conserved in the colonial coffee market mainly through white planter control of parts of the marketing chain and as a result of white planter private enterprise and skill and knowledge of marketing procedures. The white planter class boundaries were conserved also vis-a-vis smallholders throughout the colonial period not only because they controlled the marketing procedures but also because they managed to devalorise household labour at the level of circulation. This was done through a grading system which caused peasant coffee to be regarded as of inferior quality and to be paid at a lower rate to plantation coffee. In effect this has doubled the squeeze on smallholders as I have shown for it
advanced planter interests at the expense of those of smallholders. The colonial system of grading coffee has been retained in the post-colonial coffee industry.

A further aspect of internal boundary setting which occurred in the coffee industry of colonial Papua New Guinea had to do with the marketing structure and more to do with an attempt by planters to manipulate race relations as a means of further conserving their own class boundaries. Boundary manipulation on the basis of race should not surprise, for the colonial coffee industry was governed after all by the colonial state, a state structured on racialism. The racial problem for white planters in the coffee industry was how to allow the advancement of small numbers of 'natives' into ownership and control of advanced production units (i.e., plantations) but not at the same time to generate competition for themselves in the industry. This was attempted through the promotion of 'racial partnership'. Finney described this process as a system of patron-client relations, the aim being to diffuse downwards plantation skills and knowledge as a form of altruism or good citizenship. In fact, as I have shown, racial partnership was an ingenious attempt to co-opt leading 'natives' in the coffee industry to take the side of white planters. Racial partnership was doomed to fail because it was little more than an attempt to lock a black elite into a middle peasant class location. As such, they were inherently unstable as a class. This was due to the fact that the middle peasants could reproduce themselves only through specific relations with the dominant white planters (mainly because the state denied them access to financial capital for non-agricultural purposes) and through dependence on other strata of the peasantry, notably the poor peasantry. The poor peasantry were frequently mobilised by middle peasants through kinship ties to perform labour on the middle peasant's plantation, labour vital to the survival of the middle peasantry itself.
FORM AND FUNCTION OF THE STATE IN THE COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

The manipulation of markets beyond normal commercial power became more and more important to white planters as the industry expanded. Only the use of the state to reduce competitiveness in the industry could enable the white planters to secure and extend their class boundaries. In this section I explain why the white planters failed to devise a state which would become an instrument in their hands. Such an explanation is not generated by policy studies or by studies of electoral politics so these will be largely ignored in this section. Instead I concentrate on explaining the form and function of the state in the colonial coffee industry. I begin by demonstrating that in the colonial coffee industry, the role of the state’s specialist branch for coffee development, the Department of Agriculture, Stock and Fisheries (DASF), can be largely ignored for it failed to serve any useful role in relation to any of the contending classes. The role of DASF is notable only, as the next section shows, in that it failed to restrict the development of the smallholder coffee grower and therefore failed to defend the class boundaries of the white planter class. The form and function of the state in the colonial coffee industry became important in the constitution of class struggle only in 1964 with the setting up of the Coffee Marketing Board (CMB). The setting up of the CMB was triggered by the establishment of the ICO and the joining of that organisation by Australia on behalf of its Papua New Guinea colony. As we have seen, the operation of the ICO virtually demanded participation from member state branches, though the form and function the state took in relation to its domestic coffee industry was not determined by membership in the ICO. This was determined by the internal configurations of political and social relations inside the country.

In the second part of this section, I show that the CMB did not become an instrument in the hands of white planters or an autonomous branch of the state. Instead it took a Bonapartist form (in the sense that it was transcendent above all classes). The Bonapartist form reflected the configuration of class forces
in the colonial coffee industry for, while white planters were dominant in market relations, they had to share political power in the coffee industry with the Administration and the metropolitan bourgeoisie. A Bonapartist state was functional for planters because it offered them the possibility of managing conflicts between different segments of the class, particularly relations between planters in the Eastern Highlands and the Western Highlands. It also offered white planters a mechanism which made it appear that decisions in the industry could be made by peasants. The appearance of decision making ensured that the alliance established between white planters and the middle peasantry in production would be maintained at the political level. For example an important part of the colonial coffee industry was white planter and middle peasant alliance through the CMB after its establishment in 1964. The concrete manifestation of this alliance is the membership of the original CMB appointed on 9th July 1964 which was chaired by Ian Downs and included middle peasant members such as Bono Azanifa.

The way the CMB was set up in colonial times indicated its great potential for constituting class struggle in the post-colonial period because it was functionally autonomous from all other branches of the state including the DASF. However, the potential of the CMB for reinforcing class boundaries on behalf of the dominant class was limited as it focused its activities mainly on regulation in the marketing chain and did not penetrate the hidden abode of production (Marx 1954:172) of smallholders or any other class in the industry.

The Department of Agriculture, Stock and Fisheries (DASF)

Most observers who have analysed the establishment of the coffee industry in colonial Papua New Guinea give a good deal of credit to DASF for encouraging Gorokans through extension services to begin coffee production. Finney writes that

except for a few men who, like Baito Heiro, received direct assistance from European settlers, most would-be Gorokan coffee growers had to wait until the Department Agriculture, Stock and Fisheries (DASF) began to offer extension services in 1953 before they could find out enough to grow it properly. (Finney 1973:57)
The BAE (1961) presented a more balanced picture. It stated that the expansion of the local coffee industry was mainly due to the help and encouragement of the Administration (DASF), supplemented to no small extent by the activities of the European planters and the religious missions (Quoted in Cartledge 1978:23). This view is endorsed by Cartledge himself (Cartledge 1978:48). There can be little doubt that DASF did assist in the establishment of the coffee industry, because the setting up of extension services in 1953 coincided with an explosion of smallholder coffee growing. The success of the DASF extension effort in the 1950’s was due in part to its monopoly control over certain of the productive forces essential for the establishment of coffee gardens. Good and Donaldson show how DASF nurseries were planted close to the village post house and were left under the watchful eyes of the village Luluai and village constable. In July 1953 the extension officer from the Eastern Highlands district, R. W. Cottle, reported that nine nurseries had been established in the Goroka district. Of these nine, six were being looked after by Luluais and three by native men. (Good and Donaldson n.d.:22)

In the period of the establishment of the coffee industry, before smallholder gardens matured and thus generated their own seed, it is very likely that the only way in which seed could be obtained by smallholders was from DASF or from 'partnership' with Europeans. This gave DASF a power over a vital input in the establishment of the coffee industry. This was a power never equalled by DASF in the operational phase of the industry in the 1960’s. Influence in an industry is only achieved through the exercise of control at some point in the commodity chain (the production process and/or the marketing chain) and not by legislative right or executive fiat. It is often thought that those who operate and control DASF had the 'right' of influence in agriculture because it is the appropriate state department. But this view ignores the more concrete fact that in places and industries like coffee in the Eastern Highlands, where it does not control an essential input in production or a marketing pinch point, DASF could play only a marginal role in the development process. In most cases, technical expertise offered by DASF did not function as an essential input because it was ignored or not
needed by smallholders. This point was conclusively demonstrated in the period after the withdrawal of extension services in 1961, because this had no effect on the continued expansion of coffee production and planting by smallholders. Also it must be frankly acknowledged that the rôle of the didiman (extension officer) is limited because he is rarely able to contact more than a handful of growers.

DASF failed to devise approaches to development in the coffee industry that were compatible with the structure-in-production of smallholders. Under its director, W. Cottrel Dormer, DASF adopted in the late 1940's

a policy aimed at improving nutrition and living standards of the native people by mixed farming on individual smallholdings capable of producing adequate subsistence for a man and his family and in addition sufficient cash crops to obtain the money necessary to him for the satisfying of other wants and for the payment of taxes. (Good and Donaldson n.d.:12)

But there were some problems in this conception especially in so far as it suggested a change to nuclear-family-type farming and a re-organisation of households along individualist lines. I have shown how the success of smallholder coffee production was due in part to the fact that coffee production did not require a basic re-organisation internal to the household where the division of labour based on age and gender could be maintained and patterns of authority not disrupted. However, the DASF approach appeared to be a policy aimed at reorganising the division of labour in the household. Could DASF seriously expect to initiate a change that capital itself could not achieve?

DASF staff were aware of the contradictions likely to be generated by sponsoring mixed farming on individual holdings, especially in coffee. Finney reports,

in seeking to promote individually controlled coffee plots in Goroka the agricultural officers were actually following local precedents in land use, for the growing and exploitation of sweet potatoes and other subsistence crops was largely an individual matter for a man and his wife or wives. The agricultural officers did realise, however, that in traditional Gorokan society there was
an important element of co-operation and pooling of resources, and they sought to tap this without violating the principle of individual coffee plots. The formula they hit upon was simple, effective and congenial to Gorokans: coffee nurseries where seedlings were grown for distribution to individual planters, became a group responsibility and the subsequent planting, caring for and exploitation of the coffee trees were an individual responsibility. (Finney 1973:62 emphasis added)

The only part of this 'synthesis' that alters internal household organisation is, paradoxically, the communal part. Having to work in village nurseries disrupts the time household members have to devote to internal household concerns. It is a mistake to assume that group organisation external to the household is somehow the same thing as internal household organisation. The form may be the same but the household is disrupted by these external duties. In any case, the abandoning of the village coffee nurseries in 1961, when the DASF put a ban on village smallholder coffee development, meant that the 're-organisation' of the household was abandoned in favour of individual responsibility. The result was that the caring and maintenance of trees, etc., meant nothing more in terms of smallholder production of coffee than maintenance of existing internal household organisation. With the failure of the mixed farming strategy DASF reverted to a tendency to present as a policy initiative a rationalisation of an existing situation. This meant saying little more about the structure of smallholder coffee production other than it should be on small plots containing 300-500 trees (Densley n.d.:7). DASF even abandoned its attempts to get smallholders to line and space their gardens, and instead merely advised them how to care and maintain coffee. In coffee, DASF also failed to make any impact on existing marketing arrangements. DASF accepted the 'private enterprise' approach of the Administration that government marketing was a necessary evil. In taking this approach DASF undermined its support for coffee smallholdings as it failed to take the side of the smallholder where it mattered most, in marketing.

The failure of DASF was a political failure which expressed itself at a superficial level within the Administration for DASF was regarded as a weak department in relation to other
departments. DASF had no leader of the calibre of John Gunther in health for example, who continually achieved political and funding coups for his department. DASF officers were politically naive. They did not see an industry structure as a system of resource distribution which created a field of struggle between contending classes. Instead the DASF approach was one of facilitating technical innovation and diffusion (The Improvement Approach). This automatically weakened its support for the subordinate classes. The DASF never quite regained the authority it exercised in the establishment period of the coffee industry because it rarely sought nor was able to hold onto control over some valued input or market pinch point in coffee. It ended up by playing second fiddle to planters and then to the CMB in the 1960’s.

The Coffee Marketing Board (CMB)

White planters did not, however, have things all their own way in the coffee industry of colonial Papua New Guinea. Once the struggle began in 1962 to define the form and function of the special branch of the state in the coffee industry - eventually set up in 1964 and called the Coffee Marketing Board (CMB) - it became clear that though white planters were dominant in the internal marketing of coffee, white planters were merely one dominant class in one industry in one sector of the economy. It also became clear that the form and function of the CMB would be determined not only by white planters but also by the dominant classes throughout the social formation. In the setting up of the CMB the other dominant class of influence was the metropolitan bourgeoisie and the Administration itself, a social category of great importance in a colonial situation.

The complexity of the class struggle to define the form and function of the CMB resulted in its taking a Bonapartists form, transcendent above the various classes in the coffee industry. I begin the section with an analysis of the external factors, and particularly the Tariff Board arrangements and the place of Australia and Papua New Guinea in the ICO, which helped determine the form and function of the CMB. I then go on to examine the
internal determinants of the form and function of the CMB and finally analyse the effects of the CMB on the industry in the colonial period.

The circumstances surrounding the birth of the CMB ensured that its early focus would be on the problem of exporting the crop. Among these circumstances were the existing Tariff Board arrangements. These provided for the marketing of a substantial portion of the Papua New Guinea coffee crop in Australia. A further circumstance was the establishment of the ICO which it was correctly thought would soon require a branch of the colonial state to exercise certain controls relating to internal matters. There was in existence in Papua New Guinea, at the time the ICO was established, a coffee exporting committee which exercised controlling powers over the export of coffee from Papua New Guinea. The coffee exporting committee consisted of the Director of Agriculture and two coffee producer representatives Downs and Hurrell (Papua New Guinea Coffee Industry Board, April 1979). Under the terms of the tariff arrangements Papua New Guinea was obliged to ensure that sufficient coffee was directed to Australia to satisfy this by-law arrangement (Papua New Guinea Coffee Industry Board, May 1982:1). But the metropolitan bourgeoisie in Australia, like importers in the ICO, could not be sure that such an agreement would be honoured unless they had some policing power over the export of Papua New Guinea coffee or at least some say in the direction it took. It cannot be assumed that because Papua New Guinea was a colony of Australia that Australian commercial roasters could make demands and the metropolitan state would act automatically in the interests of its own bourgeoisie. In fact, political change had to be negotiated, arguments put, points of cooperation worked out, etc. This was especially the case in an industry like coffee with its complex internal and external dimensions. In decision making in the industry it was not uncommon for the Administration in Port Moresby and the Department of External Territories (DOET) in Australia to disagree. In coffee, disagreement was made more likely by the fact that influential planters could extend their political reach to the metropole.
Under the existing arrangements, the export of the crop was solely in the hands of the Administration and the New Guinea Coffee Agents Association. This was an arrangement which usually satisfied the interests of Australian roasters but provided them with few guarantees of supply. The DOET, however, became concerned that the temporary by-law arrangements, though offering assistance to producers, did not guarantee them a satisfactory sale and purchase price as had been the case in previously approved schemes (Cartledge 1978:65-66). Concerning the earlier schemes it is important only to note that there were grounds for dissatisfaction from both importers (roasters) and exporters (or producers as DOET put it) and that this situation of dissatisfaction closely resembled the circumstances at the global level before the ICO was set up.

The outcome at the level of Australia-Papua New Guinea coffee trade was similar to that which occurred at the global level for it resulted in an attempt to devise a regulating authority to ensure both a supply of coffee to importers and a satisfactory price level for exporters. Thus the Tariff Board (1962) noted that further steps toward regulation might have to be taken if the by-law provisions failed. Among these steps

the establishment of a coffee marketing board was suggested (to the Board) as a way of diminishing a number of problems facing the Territory's coffee industry. (Cartledge 1978:64)

The HFSA had been calling for some time for a Coffee Marketing Board (Cartledge 1978:71) and seemed to assume quite naturally that such a Board would be run by growers (meaning itself). This seemed to have been implicit in a statement by Hasluck in December 1962 when he said

the question of a coffee marketing Board in Papua and New Guinea was discussed with the industry several times by the Tariff Board inquiry, in connection with arrangements for the marketing of the Territory coffee crop. The view taken by the government is that a marketing Board should not be imposed on the producers and owners of a crop but should be organised at their request and in consultation with them. This consultation is close and continuous. (Quoted in Cartledge 1978:74)
An initial problem the industry faced was the problem of defining the form and function the CMB would take. This was not an easy matter because there were different problems, different state branches and different classes involved depending on whether the issue was control over exports or control over internal marketing. Grower control over marketing boards was the standard model for the majority of currently operating marketing boards in Australia. These operated under very tight regulating legislation and often gave the grower-dominated regulating board control over the internal market and export of the product. It was a system which the new minister Barnes admitted in 1964 resulted in a view that

in Australia a marketing Board for primary producers is a proven technique of significant advantage in improving marketing strength and obtaining a fair price for the producers themselves. (Quoted in Cartledge 1978:301)

Part of the reason problems were so difficult in the coffee industry was the complexity of the class structure as it related to the colonial coffee industry. The HFSA represented the dominant class in the industry (the white planters) but the metropolitan bourgeoisie could exercise influence over the metropolitan state through the Department of Trade and Industry and in this way modify HFSA dominance, particularly over the export of the crop. The fact that the state was split into Department of Trade and Industry, (DOET) and the Papua New Guinea Administration also meant that the HFSA simply did not have the reach or the resources to mount a lobbying campaign to get all branches on side. They had mounted a campaign of this type over the tariff issue but it was costly and time consuming and not plausible in most cases. In any case, there were significant differences between the various state branches. The DOET and Administration were both anxious about revenue and conscious of the political power of the planters inside Papua New Guinea. They therefore aimed that export arrangements would not alter the system of export restrictions into Australia which worked in favour of territory coffee. The Department of Trade and Industry, however, saw these restrictions as completely temporary and wished to have them removed as soon as possible. This complexity ensured that there was very little chance in the
colonial coffee industry in Papua New Guinea of one class being singled out to dominate the industry through a marketing board in the way producer marketing cooperatives did for dominant classes in many Australian rural industries.

Each dominant class—internal and external—had a significant stake in the industry and therefore in the form and function of the CMB. Australian roasting firms and the representatives of exporters, the metropolitan bourgeoisie, were naturally interested in discussions about the form and function of the CMB. The former wished to be assured of supply and were concerned that existing tariff arrangements should not be altered in a way that would increase the cost of their raw material. The latter were apprehensive lest the CMB interfere with existing export marketing arrangements. Would the CMB act as an oligopolist on behalf of the territory's growers and sell to exporters through an auction system as occurred in most African colonies or would the system of private treaty continue?

The metropolitan state itself was also concerned about the form and function the CMB would take for it would, through the Australian Department of Trade and Industry, conduct the affairs of the Papua New Guinea coffee industry when it represented Papua New Guinea at the ICO. The Department of Trade and Industry was concerned to defend the interests of Australian companies involved in coffee commerce and also to defend an ideological predisposition to minimise state control in industry and trade. The interests of the Administration in the process of setting up the CMB straddled both the internal and external levels. At the external level the Administration was as determined as planters to ensure that the crop found an export market. This was particularly urgent at the time because, as a result of the establishment of the ICO, export restrictions would have to be faced for the first time. The Administration aimed to make sure that such restrictions had a minimum effect on Papua New Guinea. Internally, of course, the form and function of the CMB would effect the role of the Administrations specialist branch for rural Development, the DASF. White planters were concerned lest the Proposed marketing board undermine their control in the industry.
The complexity of the political struggle to define the role of the CMB in relation to exports meant that in the end the decision was made on the simplest of all criteria, that of cost. In 1963 when the establishment of the Board was under consideration the Department of Trade and Industry prepared an analysis of the various functions the CMB could fulfil and in particular it presented 'hypothetical' budgets of CMB operations (New Guinea Highlands Bulletin, April 1966). These budgets were based on a CMB which engaged in direct selling to exporters. The link between the function of the CMB and the cost of its operations was thus very firmly established from the beginning. Later in 1966 the wide range of possible CMB functions and the advantages and disadvantages of each of these were published by the HFSA. The HFSA added three further functions to the 'direct selling by the Board' functions outlined by the Department of Trade and Industry. These included a) a public auction operated by the Administration, b) a proposal from an exporter (Harrisons and Crosfield (ANZ) Ltd) that a company be formed consisting of growers, buyers and the CMB to conduct auctions for the disposal of the Territory crop and c) a proposal for the Board to operate on the open market in competition with exporting agents.

All of these proposals had advantages and disadvantages, but the proposal that seemed least desirable was 'direct sales by the Board' as originally budgeted by the Department of Trade and Industry. It was a model of a CMB which would make the board's functions very similar to that in many African countries. It operated through a system whereby the grower payed a levy – usually through a reduction of the purchase price – to a branch of the state which undertook to market the crop for the grower. The state branch incurs numerous expenses such as salaries, office equipment, remuneration and travelling, etc., in the process. This usually had to be paid for by the grower out of the levy. The argument for establishing such boards is 'organised marketing', it is supposed to reduce price slumps and equalise profits. The grower should become strengthened by having his own small stake in the marketing channels. The problem with the scheme is that it is expensive – growers were told it would cost 5d per lb. (New Guinea Highlands Bulletin,
April 1966:9) to set up a 'direct selling board', and this was at time when the highest price for the best quality coffee was 4/-.

In comparison, the entire marketing costs were only 6d per lb at that time as we have seen. Growers were simply not interested in the extra expense. Another worrying feature of such schemes was that the Board had to wait until the crop had been paid for before money was returned to the grower. The Department of Trade and Industry assumed

that the basis of sales will be the remittance of 75% of the agreed value after sampling, on receipt of shipping documents and the balance to come on receipt and acceptance of the consignment. This will mean that the entire proceeds of Australian sales should be received in the month following shipment. (New Guinea Highlands Bulletin, April 1966:9)

Anyone who knows how these arrangements operate in Africa would be wary of this statement. The white planters were powerful enough politically in Papua New Guinea to ensure that such a scheme would not be imposed upon them so the proposal languished.

The result was that the existing arrangement was formalised and the CMB was relegated to a position where it played very little role in the export of the coffee crop in colonial Papua New Guinea. Certain safety valves were built into the CMB legislation but basically its function was mere regulation at the export level. The CMB regulated exports by means of licensing systems, exercising supervision over sales and distribution, standards and selling practices in respect of exports and promoting trade, market research and developing new markets and ensuring continuity of supply. At the external level, the CMB was to function as a regulatory tool mainly for the purpose of administering ICO quotas. It did not operate in any particular dominant class interest at this level. The dominant class in the industry (the planters) had to share power with the metropolitan bourgeoisie thus the CMB's external role would be neutral in class terms. For the HFSA a regulatory CMB meant precisely that, and while this was bearable at the export level it was not conducive to HFSA dominance in the internal flow of coffee.
White planters could survive the failure to fashion the CMB in their own class interest at the external level, for existing exporters were not threatened and the planters had close financial ties with them. In any case the mere establishment of the CMB at the export level ensured that there was now a means of dealing with quota restrictions on an industry scale. This was the planters' main concern. However, the biggest problem for the white planters with the eventual form and function of the CMB was its internal role.

At the internal level the CMB took the form of a Bonapartist state. The Bonapartist form of the CMB at the internal level reinforces the dominance of a particular class only in the most general way. This is so because the class nature of its role was merely to represent a compromise between competing dominant classes and to secure the reproduction of a class-divided society. A Bonapartist state emerges out of a series of skirmishes and class struggles which do not result in a complete victory for one class or fraction. The form of state determines its function. As hypothesised in Chapter 1, the 'ideal' functional mix of a Bonapartist state is high functional autonomy and low political penetration. Political penetration is defined as the process by which the most influential and powerful actors - the penetrators - in the ruling group and state bureaucracy use state power and the state apparatus both to maximise state sovereignty and to pursue the ideal and material interests both of themselves and of the society over which they exercise control (Coleman 1977:8). Functional autonomy is the degree of heterogeneity within the state apparatus. It shows the extent to which different classes can gain representation inside the state. We can show how the CMB came to be Bonapartist in the coffee industry by analysing its class history and its institutional power.

The Bonapartist form of the CMB emerged as a direct result of struggles between dominant classes over its marketing role. The HFSA's initial proposals for internal marketing were made at the first Goroka Tariff Board conference in 1959. The HFSA suggested that the new marketing board undertake 'compulsory marketing
The HFSA may have thought that 'compulsory marketing' would mean maximising the use of existing processing facilities at the direction of the Board (and therefore benefit the dominant class in the industry). However, this suggestion was not liked by the Administration, as should have been obvious to the HFSA, which had far greater political power than the planters in the social formation as a whole. The marketing role of the CMB which emerged was a classic class compromise. The Papua and New Guinea Coffee Marketing Board Ordinance, No. 64 of 1963 contained a range of 'tough' control measures over internal marketing but these tough measures have never been activated. The ordinance contained provisions for persons to furnish returns which were to be verified by statutory declarations which would give details of all forward contracts, of all coffee trees planted or intended to be planted, of the estimated amount of coffee likely to become available for disposal during any period; of all sales in quantity and value; of provisions for registering coffee processing facilities and the fixing of maximum or minimum prices or both at which any kind or grade or classification of coffee produced in the Territory may be bought or sold. There was also provision in the legislation for the Board to purchase the crop if necessary (New Guinea Highlands Bulletin, April 1966:8). It is interesting to note, as we will see in the post-colonial section, that legislation to set up the Coffee Industry Board also contained control measures over marketing but again these have never been activated.

The CMB was Bonapartist also because it did not have the social power to pursue a class interest. The CMB had virtually no funds because in the beginning levies were collected only to cover the cost of the administration of the Board. In the Papua New Guinea Coffee Marketing Board Ordinance, No. 64 of 1963, the permitted levy was 5c at this time and for most of the colonial period. The CMB did have written into its legislation the power to fix maximum and minimum prices or both for any kind or grade or classification of coffee produced in the Territory which may be bought and sold and there was much talk in the beginning of a 'further valuable function' of setting a minimum price to be paid to 'native' growers for parchment coffee (Cartledge 1978:73).
But a viable price stabilisation scheme would require the financing of a stabilisation fund and white planters were not prepared to contribute to its cost (Cartledge 1978:233). CMB expressed its position on planting policy but any power to enforce planting policy was held by DASF so again the CMB could exercise little social power in this area.

The low political penetration of the CMB in its actual market role come about because the HFSA realised that its political position was weak in the social formation as a whole and that 'compulsory marketing' by a Board was likely to mean that the planters themselves would be the penetrated rather than be the penetrators. 'Compulsory marketing' by the Board would probably trigger a demand from other classes (dominant and dominated classes throughout the social formation) and the Administration for market restructuring so that benefits from coffee marketing could be spread more widely and equally. This is usually the fate of the dominant class in a competitive capital sector. The HFSA soon came to realise that its best interests were served by supporting the idea of a non-interventionist, purely regulatory board. As such, it could be a board in which the planters themselves played a major role as personnel on the Board. The HFSA learned this lesson with a vengeance, for their key political actors President Ian Downs and Lloyd Hurrell (later long-serving Chairman of the Coffee Marketing Board) were responsible for the philosophical justification and systemisation of a regulatory, non-interventionist coffee board which retains this form as the Coffee Industry Board (CIB) in the present.

There were other advantages to the HFSA of a CMB with low political penetration. It provided a mechanism whereby middle peasants could be incorporated into an industry decision making structure. Registration or licensing arrangements or processing changes which suit the large white planters may not suit the middle peasants given their quite different class location in production. However, the HFSA overcame this problem by claiming that the CMB represented all 'growers' in the coffee industry and by adding to the incorporation in production of middle peasants, their representation on the CMB. The first CMB had as members
middle peasants such as Bono Azanaifa and Salaen Sakaen along with white planters Downs and Hurrell. Later middle peasants like Soso Subi joined white planters such as Middleton. The CMB achieved a perfect synthesis of incorporation of middle peasants and the appearance of smallholder representation by labelling middle peasants representatives as smallholders even though their properties were far in excess of the smallholder garden plot. This deception was still effective in 1982.51

The polite fiction that the CMB represented the undifferentiated group 'grower' was also used by the white planters in an attempt to extend the functional autonomy of the CMB. A.L. Hurrell, Chairman of the CMB from 1965 until the late 1970's throughout the period of his chairmanship systematised the idea that 'growers' were an undifferentiated category by constantly counterposing the interests of growers to those of government. In 1977 he wrote

\begin{quote}
one factor I regard as of utmost importance is that the Marketing or Industry Board cannot be regarded as a government institution. It has a direct and important responsibility to the growers. (Post Courier, May 27, 1977)
\end{quote}

But the planters were not very successful in increasing the functional autonomy of the CMB. In theory a statutory authority such as the CMB should have a direct line of authority to the Administration and a degree of autonomy from other branches dealing with rural development (i.e., DASF). In practice, however, a high level of functional autonomy was not achieved. Two reasons can be offered for this. First, the CMB simply did not have the resources to establish a strong measure of autonomy within the Administration. It did not for example, have its own extension officers or inspectors. Second, though the CMB may have had a direct line of authority to the Administration in a colonial state this is not the same as a direct line of authority to the Administration. In a colonial situation, these different levels of authority make the status of statutory authorities ambiguous.
Was the CMB to have a direct line of authority to the Minister and therefore achieve the autonomy Hurrell wanted or was it to be incorporated in the Administration as simply another department? This was tested during the events of 1966/67 when the Chairman of the CMB went over the head of the Administrator in an endeavour to get approval from the Minister of Territories for the CMB to act as a buyer of last resort in a marketing crisis. In previous political struggles, the planters usually sided with the Administration against various branches of the metropolitan state such as Treasury or the Department of Trade and Industry (Cartledge 1978:145). The Minister for Territories was not pleased by this departure and met with the Chairman of the Coffee Marketing Board at Port Moresby in September 1967 with the aim of setting out clearly the limited degree of functional autonomy CMB was to be permitted. The Minister stressed that

Statutory Boards though independent are part of the governmental structure of the Territory and cannot operate in isolation from general governmental policies for the advancement of the Territory. Normally little need should arise for a Board to go beyond the Administration - the Minister's representative - in ironing out problems which may go beyond the scope of the Board to determine by itself. Where a question cannot be solved in the Territory it should go forward to the Minister with a complete statement on all relevant aspects and the Administration's recommendation. Effective liaison with the Administration should be noticeable through the official member of the CMB. Under legislation, CMB or its Chairman has the right of recourse to the Minister but at the stage of political development in 1967 the Minister would not normally expect to deal with a proposal until he had received the Administrators recommendation. (Cartledge 1978:149-150)

The low level of functional autonomy in the CMB was not ideal from the viewpoint of the white planters for although they had 'captured' the CMB, this did not enhance their political position inside the state to any great extent. They had attached their political future to a weak form of state. This realisation coincided with a general downturn in the economic fortune of the planters throughout the late 1960's despite their continued dominance of the internal marketing system. The cause of this downturn was largely due to the fact that international regulation meant that coffee prices stagnated in the late 1960's.
and early 1970’s. After the 'netting' crisis in 1966/67 many planters seemed to have definitely decided that the plantation coffee industry had no future because they could see no solution to the problem of exporting the crop on the world market other than coercing smallholders to stop producing. As the next section will show the planters could not use the existing form and function of the state to achieve either of these goals and so many decided in the late 1960’s to abandon the industry.

CLASS RELATION (SUBJECTIVE) IN THE COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

The white planters were forced to adopt a Bonapartist CMB with low functional autonomy and to put up with weak DASF, but did this undermine their dominance in the class struggle of the colonial coffee industry of Papua New Guinea? To show that it did we have to turn to the second moment of the class relation which was outlined in Chapter 1. The second moment of the class relation can be called class relation (subjective). This is the real moment of class conflict and class struggle for this is the moment of boundary struggles when classes are acting subjectively to expand their space and hence to shift boundaries in their favour. The subjective (self-maximising and expansionary) actions of classes and class fractions are actualised in two main ways: first, by forming alliances with other classes/fractions/social categories in the sector and second by developing a coherent ideological strength which reinforces dominance over other classes/fractions/social categories in the sector. The role of the state can be crucial in influencing boundary siting and boundary shifts.

In this section, I show that in the late 1960’s the self-maximising and expansionary actions of the dominant class in the sector, the white planters, was beginning to decline as their class alliances and coherent ideological strength began to decay. I show how this decay began to occur at both the external and the internal levels. At the external level I argue that decay took the form of a contradiction between international regulation through the ICO and the special arrangement between Australia and
Papua New Guinea for exporting the Papua New Guinea coffee crop. The failure to resolve this problem undermined the class interests of white planters. At the internal level I argue that decay took the form of white planter loss in the 'silent' class struggle with smallholders. This loss occurred because the Bonapartist state could not act in the service of the white planters to halt smallholder expansion.

The 'Netting' Crisis of 1966/1967

Australia/Papua New Guinea joined the 1962 ICA as a net importer of coffee. This meant Australia/Papua New Guinea was not given an export quota. Article 38 - Shipments of Coffee from Dependent Territories - 1962 International Coffee Agreement stated that

the shipment of coffee from any of the dependent territories of a Member to its metropolitan territory or to another of its dependent territories for domestic consumption therein or in any other of its dependent territories shall not be subject to any export quota limitations, provided that the Member concerned enters into arrangements satisfactory to the Council with respect to the control of re-exports. (International Coffee Agreement 1962)

The intention seemed to be that the colony was free to export any amount of coffee providing this export went only to the metropole or other dependencies. The idea of 'netting' went further than this however. 'Netting' suggested

that if Aust/PNG joined as a single importing member, PNG exports to countries other than Australia would not technically become subject to quota limitations as long as Aust/PNG remained a net importer of coffee. The text specifically provided that each contracting party together with those of its dependent territories to which the agreement was extended shall constitute a single member. An importing member was defined as a member or country which was a net importer of coffee, that is whose imports exceeded its exports. In other words a legalistic interpretation was that while Aust/PNG was a single importing member, PNG exports were not subject to restriction. Prospects were thus that PNG could export up to the total of Australian imports of coffee (i.e., netting). (Cartledge 1978:104)
The idea of 'netting' was never formally agreed to by the ICO although it was the manner by which Papua New Guinea conducted its coffee exports for the life of the 1962 ICA.

The problem that arose in 1966/67 can be simply stated. It was that whatever 'interpretation' was put on the colonial clauses of the ICA, Papua New Guinea had reached the limits of its permitted exports. Whether Papua New Guinea exports were based on 'netting' or on Article 39(2) [which stated that

any Trust Territory administered under a trusteeship agreement with the United Nations whose annual exports to countries other than the Administering Authority do not exceed 100,000 bags shall not be subject to quota provisions at the Agreement, so long as its exports do not exceed that quantity. (International Coffee Agreement 1962)]

Territory production in 1966/67 would exceed the maximum permissible exports by between 2,500 and 5,000 tons (New Guinea Highlands Bulletin, January 1967:12). A solution had to be found for the surplus production, and that proposed by the CMB was a fairly simple one. It was that a loan be obtained from the Rural Credits department of the Reserve Bank of Australia and advances made to growers and processors against unsold stocks. The amount of money involved for this loan was quite substantial. The CMB estimated that the cost of purchasing the surplus 5,000 tons in September 1967 would be about $2,000,000 on 1966 Board calculations (New Guinea Highlands Bulletin, January 1967:13). The Reserve Bank interest rate on such a loan would be 4 1/4 per cent. The CMB proposed to minimise the cost of the loan to growers in a number of ways. It would restrict administrative charges for the advancement scheme to 1/4 per cent per annum so that borrowers paid a total of only 4 1/2 per cent interest on the loan.

The CMB was determined to present the difficulties which arose in 1966/67 both to growers and the Reserve Bank of Australia as a temporary crisis which would be shortly resolved. This was necessary in order not only to have the idea of a loan made acceptable to the Reserve Bank, but also to retain the loyalty of all planters. Some planters were unhappy both at the cost of the
scheme and the implication for the industry of a high level of state involvement in the industry. Would it not be better to abandon 'netting' arrangements and go it alone in the ICO with a distinctive export quota for Papua New Guinea? The CMB seems hardly to have considered this prospect, preferring to cling to its colonial ties and dependence on the metropole by retaining 'netting' and trying for a solution to the crisis which involved assistance from the metropolitan state. Both the Reserve Bank and some planters were sceptical at the claim that 'assisting' the industry through loans was a temporary measure at all and many wondered whether the industry would have to be 'bailed out' in this way in the future.

This proposed solution to the 'netting' crisis quickly exposed all the main contradictions to which the colonial coffee industry was subjected. It showed that even though the bulk of coffee was grown by smallholders, smallholders played virtually no role in the politics of the industry and were disadvantaged by 'deals' done by the dominant classes. Also exposed was the contradiction in the CMB's Bonapartist role. On the one hand, its low functional autonomy made it excessively poorly structured to advance or even defend the interests of white planters in the industry against other dominant classes in the social formation. On the other hand, it quickly became apparent to all concerned, including the CMB, that the CMB would become interventionist if the plan went ahead. The CMB would in fact become a buyer of the surplus production and would probably become the seller of this stock when a market was found.

Not all branches of the metropolitan state were opposed to the idea of a more interventionist CMB. The Department of External Territories appeared to support the CMB for it felt that the report of the DPI failed to acknowledge that the Ordinance did give the CMB the statutory power to market and control coffee exports (New Guinea Highlands Bulletin, January 1967:13). It felt that a structural surplus was not inevitable and that assistance of the type requested by the CMB was not unreasonable. However, the crucial weakness in the case put up by the CMB for assistance was that it did not have the full support of the
The Administration hesitated to support the proposal, perhaps because it feared the consequences that a marketing role of the CMB might have upon smallholders. It was not quite prepared to sell smallholders short. It was convinced that smallholders stood to benefit most from a fairly competitive privately operating marketing system. The Administration may also have been ambivalent towards the CMB proposals because of the change of the CMB’s action in going over the head of the Administration in October, 1966 in an endeavour to get approval from the Minister of Territories for the CMB to act as a buyer of last resort (Cartledge 1978:145). The action failed and it was this action which prompted the Minister of Territories to meet with the CMB chairman and to lecture him that the CMB had low functional autonomy because it was answerable to the Administration.

The breakdown of the alliance between the Administration and the planters and the hostility of the metropolitan state to the CMB’s proposed solution to the ‘netting’ crisis in 1966/67 resulted in the CMB’s deciding not to pursue the possibility of a loan from the Reserve Bank. The experience showed white planters that they would be very lucky to get even minimal assistance from the metropolitan state. The planters could not rely on subsidies or assistance from the metropole in the event of a structural surplus and it seemed they would be expected to bear the cost of overproduction in the industry. Even if the Reserve Bank were prepared to make available money to finance a stockholding scheme, it was clear this would be done only under the extremely strict conditions such that the loan would have to be repaid in a year. It would be difficult to get such a loan through cabinet and much opposition would be expressed if the proposal included a high level interventionist role of the CMB. White planters in the colonial coffee industry were clearly not being underwritten by the colonial state. The CMB was not an adequate mechanism for the representation of their interests because of the severe limits imposed on its role and the Administration was not prepared to back the planters in all cases in their disputes with the metropole. The failure of their proposed solution to the netting crisis in 1966/67 clearly highlighted for all planters
that their dominance of the colonial coffee industry of Papua New Guinea was being undermined as their alliances with other dominant classes in the social formation began to collapse. The alliance within the dominant classes was strong enough to reassert dominant class power against subordinate classes and to engineer an agreement among the dominant classes that the solution to the problem of surplus production might be achieved by restricting the production of smallholders. But the alliance was not strong enough to generate a solution to the problems of the industry which would involve some creative restructuring in the industry or a rethinking of the role of the CMB.

The 'Silent' Class Struggle

At the same time that the dominant alliance was teetering, the dominant class of planters was engaged in a class struggle with the main subordinate class in the colonial coffee industry of Papua New Guinea, the smallholders. It was becoming common within the dominant class alliance to explain the marketing difficulties which began in 1966/67 as the result of continued expansion of production rather than to the inadequacy of 'netting' or the failure of the dominant classes to provide a suitable industry structure or proper role for the CMB. In the common explanation it was the smallholders who were blamed for most of the problems in the industry. This explanation was endorsed by all coffee 'authorities' including Densley of DASF who wrote that

the period prior to 1973/74 presented Papua New Guinea with marketing difficulties as coffee production, particularly smallholder coffee production (my emphasis), was outstripping Australia's consumption growth rate (around 10 to 11%) despite an almost complete withdrawal of coffee extension activity. (Densley n.d.:17)

The solution, not surprisingly in a colonial regime, was an attempt to restrict forcibly native production or to adopt what the HFSA cleverly called 'planting restrictions of a non racial type' (New Guinea Highlands Bulletin, July 1965:23). By this statement the HFSA meant that controls over New Guinean planting
should be imposed to equal the restriction on the European element of plantation expansion to the area granted in leases released for coffee before March 1962.

This was a 'silent' class struggle because, while the dominant classes were actively promoting coercive state measures to restrict smallholders production, smallholders were resisting this dominance, albeit in an unorganised, non-conflictual manner. The 'silent' class struggle could be thought to have been won by smallholders because the continued might of the dominant classes and the state failed to halt their continued expansion. Their victory can be attributed to three main factors. First, the colonial state and its agency designated with the task of restricting smallholder production, the DASF, was simply not up to the task. Second, because the CMB was not a marketing authority and because marketing was in private hands, the smallholders were able to benefit from a good deal of flexibility in the system. Pinch points were not controlled by the state and smallholder provision of productive forces from within the household made them immune to attempts to control or restrict the use of the productive forces. Third, the attempt to restrict smallholder production undermined the ideological hegemony of the white planters in the coffee industry. This caused the legitimate dominance of white planters to come under question. Their claim that growers were an undifferentiated category, was made suspect by the extreme attempts of the HFSA to get smallholder production restricted. While legitimacy of white planter dominance in the industry may have been undermined in the eyes of smallholders themselves (though this is difficult to demonstrate) it was certainly undermined in the eyes of the Administration which was not totally convinced that restriction of smallholder production was a desirable or even plausible solution.

The initial enthusiasm of the Administration, chiefly through DASF, for smallholder coffee expansion and encouragement of local people to plant coffee was soon tempered by the very success of the growth of smallholder coffee production. Almost from the time of the first smallholder harvesting in the early 1950's the
smallholder stratum of the industry underwent a massive explosion of growth, both in terms of the number of coffee trees planted and in the amount of coffee produced from smallholdings (Table 8). Between 1958/59 and 1968/69 production of coffee in Papua New Guinea increased from some 1,220 tonnes to nearly 20,000 tonnes and much of this was due to an increase in smallholder production (Densley n.d.:3). Increased production was accompanied by a huge increase in the national stock of trees which, increased in the ten years from 1963 from less than two million trees to more than thirteen million. Quite clearly most of this expansion was the result of plantings by smallholders (Dick 1977:7).

The Administration was quite unprepared for this boom in smallholder coffee. The Administration was concerned to ensure that the boom not turn into a decline in enthusiasm for cash crop development if smallholders experienced disappointment in coffee as they had done with other cash crops. Disappointment might come either through marketing difficulties in either getting the crop out or a fall in price. Disappointment might also come through an inability of DASF to provide services and assistance to the new army of smallholders. As a result of these concerns a special conference was held in Goroka in 1959 to plan the DASF extension program for coffee. The result of this conference was a decision to restrict extension activities in coffee (Finney 1973:66). This winding down of extension assistance was the first stage of restriction of smallholder coffee production. It became the established colonial coffee policy to discourage increases in smallholder coffee production by withdrawing active extension assistance for coffee.

The first stage of restriction of smallholder coffee production was well within the operational competence of DASF and its administration for it simply involved a redirection of resources already under the control of the DASF. Instead of providing extension assistance for coffee, DASF could switch its assistance to helping smallholders develop other cash crops. Where advice was offered for coffee it would be mainly in the area of care and harvesting of the plant and not in processing technique or advice
on establishment of new gardens. DASF withdrew completely its assistance for the establishment of new smallholder gardens and closed its nurseries at Aiyura, which had provided much of the early seed for the establishment of both large and smallholdings in the industry. However, this first stage of restriction was not successful in slowing down either smallholder production or plantings.

In the period immediately after withdrawal, smallholder production increased at the fastest rate ever in the history of the Papua New Guinea coffee industry. It was...

... a period of self-generated smallholder production ... in a situation where agricultural field staff had little influence on coffee plantings at this stage. In spite of minimal extension input from 1961, smallholder production increased in a seven year period to 1968/69 by about 28% per annum although the rate of increase dropped dramatically in the following five year period to about 9% per annum. (Densley n.d.:3)

The explanation for the failure of the first stage of the restrictive policy of the Administration is to be found in an analysis of the structural features of the smallholder class location and the limitations of the colonial state in the industry. Both these aspects made it impossible for dominant classes to roll back smallholder class boundaries in their own interest.

As we have seen, the main feature of smallholder coffee production is that the productive forces, land and labour are provided from within the household. This fact limits the role outside agencies such as the DASF play in smallholder production after the establishment phase. Smallholder gardens were established on customary land over which the DASF had no control and labour was unskilled and provided from within the household so its use could not be regulated by the state. Once the industry was established it seems likely that smallholders had no need for seed or advice from outside for the establishment of gardens because both seed and establishment advice was provided by other smallholders. This certainly seems to be the implication of Dick's survey.
Coffee growing like many other agricultural enterprises involves certain key operations which must be performed satisfactorily if a marketable product is to be obtained. The successful planting and growing of the trees has posed little problem to people who are accomplished agriculturalists. The fact that nearly 80% of the growers surveyed learnt about coffee growing from other villagers is not surprising when it is remembered that extension services were withdrawn within two years of a policy of active encouragement being adopted. More critical - and more notable - has been the diffusion of knowledge of harvesting and processing. If these quite new skills had not been mastered the smallholder industry would not have developed. Most growers claimed that they learned processing from fellow villagers while a considerable number (14%) acknowledged plantation personnel or missionaries as having taught them. (Dick 1977:115)

Smallholders escaped DASF control over their production due to their location in a production system where essential inputs were provided from within the household. The state could have imposed restriction on smallholder coffee either by artificially tampering with the smallholder price or restricting the amount of smallholder coffee a processor could process but this would interfere with the profit margins of the processors. In any case, the Administration was not quite prepared to argue that smallholders should be restricted in their sale of coffee due to poor quality. The marketing points were privately controlled and it would be difficult for the state to enforce any restrictions on the marketing of smallholder coffee. The degree of competition in the industry did at least ensure that restrictions on the internal marketing of smallholder coffee were not workable. The dominant classes and the state were thus unable to impose marketing restrictions on smallholder coffee largely because the dominant classes benefited from a state which was non-interventionist and thus not a marketing authority. In a supreme irony, the fact that the state was Bonapartist meant that it was not an adequate instrument to be used to roll back the boundaries of the subordinate class.

The failure of the first stage of restriction of smallholder plantings and production led Downs in the HFSA journal to accuse the Administration of 'incompetent and unimaginative' direction...
in relation to agriculture and lack of awareness of the gravity of the threat of overproduction in the country. Downs argued that

The New Guinea coffee industry is now confronted with essential international controls which establish a clear limit upon exports. The time has now been reached for firm restrictions to be placed upon further coffee plantings ... our major crop now clearly faces a point of final limitation. Further developments of indigenous coffee (expatriate production is clearly limited by existing leases) would be suicidal for the industry. (New Guinea Highlands Bulletin, April 1967:8-9)

and that

The Department of Agriculture may not have a mandate to stop the planting of coffee in the way in which it is being stopped in other countries who are our partners in the International Agreement; but it certainly should be directed to discourage forthwith the unrestrained planting which continues throughout the Territory. (New Guinea Highlands Bulletin, April 1967:11)

But as the Administration asked, when it admitted it could not impose planting restrictions, how could the government prevent coffee planting on land it did not own when it did not have the authority to do so and how was the government to solve the many problems of administration of any prohibitions on coffee planting by local people which were sure to arise? (Cartledge 1978:275)

Downs did not accept the limitations imposed upon the government due to either the structure of the industry or the structure of the state and continued with his damaging broadside at the Administration.

In a sustained polemic Downs used almost every spurious argument imaginable to get the Administration to adopt coercive measures against continued planting by smallholders. He claimed to be arguing, as is always the case with self-interested dominant class arguments, from a concern not solely based upon the interests of the European farmer but of the Highlands people as a whole (New Guinea Highlands Bulletin, April 1967:9). His tone was that 'we' - meaning leading growers and the Administration - must get together to protect the industry as a whole. He argued that the Administration was obliged to instigate planting restrictions of smallholders because Papua New Guinea had an
inherent obligation to limit production under the terms of the ICA. He did not mention, however, that such production controls as existed in the ICA were not enforceable nor did he warn that a country which did impose production controls disadvantaged itself against other countries which did not impose them. It became evident later that even the withdrawal of extension throughout the 1960's may have disadvantaged Papua New Guinea in later quota allocations compared with countries like Colombia which did not adopt domestic production controls.

Downs also rolled out the classic dominant class argument that smallholders who grew cash crops had to be protected from themselves to ensure they did not devote all their energies to earning cash and neglect food production. Downs claimed the food garden area had diminished and that this was a good reason to restrict the expansion of cash crop production. As we have seen already, however, this issue is far more complicated than a simple trade-off between the area under cash crops compared with the area under food crops. Downs stood upon the record of the HFSA that it led the way in introducing coffee in the Highlands despite solid opposition and obstruction from the Administration in the early stages. Similarly, he noted, the HFSA was again leading the way in warning the industry of the need to take more serious measures to restrict planting. He considered that the Administration was displaying a good deal of backwardness in not raising the alarm and informing the smallholders of the need to get out coffee. Downs noted the excellent prospects offered to smallholders through the development of alternative cash crops such as tea, locally grown staple foods, sweet potatoes, rice, all of which could be developed he claimed by smallholders with proper Administration assistance. The Administration could achieve all these changes he argued if only it was prepared to lead the way and if those at the top did not get in the way of the individual agricultural officer who 'can lead the people of this country to economic salvation if his importance to this country were to be understood' (New Guinea Highlands Bulletin, April 1967:12). Downs' shrill arguments did not get far with the Administration and may have succeeded merely in undermining the Administration view that the HFSA was the sole and legitimate
representative of all growers. The Administration was moving at this time towards a period of disengagement as self-government approached and was not about to undertake coercive measures which might destabilise the main agricultural export crop in the Territory. Downs and other white planters may merely have further damaged the alliance between them and the metropolitan state in the run-up to Independence by voicing views that were obviously self interested, emotional in tone and anti-Administration.

White planters in the coffee industry of colonial Papua New Guinea could not directly exploit smallholders so they had to go outside the realm of production. They did achieve a degree of vertical integration in the market but they required state support for manipulation of marketing structures at both the external and internal level if they were to survive. In this, the white planters failed. At both the external and the internal level the colonial state in the Papua New Guinea coffee industry remained Bonapartist and thus beyond the control of the white planters. At the external level white planters failed to devise a form of state which would adequately defend their interests at a time of export quotas and at the internal level they failed to have the state curtail expansion of their competitors, the smallholders. The planters also failed in their program of incorporation of leading national growers to adopt the interests of the planters through the middle peasant strategy. The planters felt bitterly betrayed by the Administration for these failures.
Endnotes

1. This is not to ignore the significance of price in domestic coffee industries, much less to claim that domestic price differences inside a country do not exist, but merely to note that the comparative absence of price competition from outside means that internal price differences are not necessarily determined by a domestic or international market. It is possible that they function as political mechanisms.

2. This is an important point for it should not be assumed that what follows, in its specific detail, can apply to the Papua New Guinea arabica coffee industry as a whole. In Chimbu for example where the terrain is much steeper and population density much higher and where a plantation industry was not established in colonial times the development of the Chimbu coffee industry has taken a very different path. (See B. Standish (1981) for some detail on Chimbu coffee). However, I would claim that the analytical framework used here can be used to explain coffee development in the various highlands provinces.

3. The amount of land leased to Europeans in the years 1952-1954 was also high. 'Prior to 1952, 4833 acres was leased to Europeans in the central highlands but with the lifting of the last restrictions on settlement in 1952 in the next two years nearly three times this amount 13,109 acres was leased.' (Donaldson and Good n.d.:146)

4. HFSA stated that while failure by native people (at the time owning about 55% of total trees in Highlands) to sell coffee will not impair their actual subsistence, such failure will amount to a government blunder in encouraging a vital avenue of economic development. The HFSA believed that the future economic development of New Guinea should be integrated with the Australian economy and that in the case of coffee, a crop which could not be grown in Australia, New Guinea
growers should receive the same support and encouragement customarily given to the Australian producer on the mainland. (Cartledge 1978:29-30)

5. It is difficult to determine whether the push for a PNG coffee authority came from inside or outside Papua New Guinea. Cartledge claims that the initial push came from the HFSA though he notes that 'the Tariff Board report of April 1962, released in November 1962, also favoured the establishment of a Coffee Marketing Board (CMB)' (Cartledge 1978:71). Presumably the Department of Trade, signatories to the agreement, realised that the policing of the agreement required the regulation of exports through the allocation and licensing of exporters and the issuing of coffee stamps, and that this could only be properly done by an agency within the dependent territory. It does appear, at least according to Cartledge, that the colonial administration and the Department of External Territories were 'cool on the idea' (Cartledge 1978:71). Perhaps the Administration were fearful that the CMB would be captured by the HFSA and that the administration's authority over the industry would be reduced. They were certainly opposed to the suggestion of the HFSA that the CMB take compulsory control of the marketing of territory coffee (Cartledge 1971:32). This idea was quickly shelved and it seems certain that the Department of Trade would also have been opposed to a CMB function of this kind.
6. They were extremely backward societies, a term used in a technical sense to indicate a) that the unit of production was based on the household and usually on a gender or age division of labour rather than one of skill, and b) that socio-economic authority was both vertically and horizontally contained. Horizontally in the sense that the spread of exchange relations was limited in a given territory by its kinship nature and vertically because authority could only be exercised at the level of exchange and not production. I will show in this section that coffee, despite its commodity status, was incorporated into a 'backward' household.

7. According to Finney (1973:10) the sweet potato revolution was the main reason the population has always been high in the Highlands because good conditions allowed the sweet potato to mature in as little as four months. The raising of pigs also helped population growth.

8. Hasluck, as Parker (1966) shows, had taken advantage of the geographical proximity to Australia of Papua and New Guinea to 'centralise' administration. The administrators role for example was confined within much narrower limits than that of the Governor in a British colony. Parker writes

   Though his (The Administrators) administration is responsible in New Guinea for nearly the whole of the functions which are carried out in Australia by state and federal governments together his administrative discretion and authority are in practice scarcely equivalent to those of a single department in Canberra. (Parker 1966:196)

9. The purpose of processing is to separate the green coffee bean, the bean of 'commerce' as Haarer (1962:256) calls it, from the berry (or cherry as it is called in Papua New Guinea). Cherry is the name for coffee which is ripened on the tree ready for harvesting and for coffee sold without any processing whatever. There are a number of stages to processing and a number of different methods which can be used to extract the green bean from the berry. It is important to understand the various stages of the processing of coffee because the degree of processing undertaken
determines the amount of equipment required by various production units and thus influences investment. Processing is also important because the stages of processing more or less determine the domestic marketing structure and thus the mode of appropriation of surplus which exists in coffee marketing chains. In explaining the various stages of processing it is simplest to begin with the beans of 'commerce' which are most familiar and work back along the processing chain to the berry itself. The beans have a very hard outer casing or hull which is retained at the 'parchment' stage of coffee processing. The beans in their hulls are separately enclosed in a mucilaginous substance which is sweet to the taste and immediately surrounding this is the somewhat thick skin of the fruit (Haarer 1962:256).

The process is one of stripping away the outer layers of the berry in order to recover the green coffee bean, which is the form in which coffee is sold for export to roasters or instant coffee manufacturers. The greatest overburden is to be found between the cherry and the parchment stage with a recovery rate in Papua New Guinea of only 0.18 kg of parchment coffee from 1 kg of fresh coffee cherries. Between parchment and the green coffee bean the recovery rate is much higher, 1 kg parchment coffee giving 0.83 kg green coffee on largeholdings in Papua New Guinea. The recovery rates affect all calculations made in relation to coffee and will be used throughout the text (Table 33).

The two different methods of processing Arabica coffee are known as the 'dry' method and the 'wet' method. The 'dry' method is used in Brazil for about 80% of its output and turns out low quality base beans. The 'wet' method is used in Papua New Guinea and many other places to produce high quality washed Arabica coffee. The 'dry' method is used where water is scarce and consists of spreading the beans in the sun for about three weeks. The beans go through a process of fermentation through the loss of moisture. The harder shrivelled cherry is then hulled after imperfect cherries are separated out. As Wellman notes 'Drying may
take days or even weeks depending on the cherry' (Wellman 1961:373). The 'wet' method involves a good deal more skilful handling and specialised equipment. The 'wet' method requires that the cherries be picked when they are ripe, so as to be suitable for the next stage, pulping. The principle of pulping is to squeeze the ripe oval fruit so that the encased beans fly out under pressure from the berry. The skin of the berry can be then pulled back and discarded. At this stage the encased beans are covered with the mucilaginous substance which must be removed otherwise the encased bean can become sticky and pick up a taint which can ultimately dry on the parchment and affect taste. The mucilaginous substance which can affect taste, is removed by fermentation in a vat. Fermentation does not affect taste nor does it loosen the parchment casing. Fermentation merely removes the sticky substance. The encased bean is then washed and sun-dried, at which stage it is known as parchment. The process of hulling or curing then begins with an extensive drying programme, either by sun or rotary, which takes about eight days (Haarer 1962:271).

The beans are then ready to be hulled. Hulling is the separation of the parchment casing from the green bean itself. The hulled beans are then polished, sorted, graded and bagged for export. The principal argument in favour of the wet method is the higher quality, superior taste and therefore higher market value of the washed Arabica bean. The main argument against the 'wet' method is that it is very labour intensive. In most countries there is not really a choice between 'wet' and 'dry' methods because climatic conditions can preclude the dry method as in many countries where cherries would become mouldy or could not be properly dried in the sun (Wellman 1961:373).

10. It is described by Ford as the biological two year bearing cycle that affects Arabica trees in particular although it is relatively unimportant for robusta trees. It has been observed that Arabica trees have a tendency to bear heavy and light crops in alternate years which
has given rise to the concept of 'OFF' years and 'ON' years in the coffee producing countries of Latin America. (Ford in Adams and Klein 1978:37)

11. This view is expressed by Townsend (in the post colonial period). He writes,

plantations provided 43% of production in the Western Highlands and 41% in the Eastern Highlands because they offer superior quality beans and have their own processing facilities, plantations received a higher return than smallholders. (Townsend 1977:420-421)

12. I use the term 'commonly known' to describe the common conception that management is a learned objective skill. I do not agree with this view of the role of management for I regard management as the exercise of class interest. The impossibility of teaching management skills though not of socialising people into class perspective should make the 'common' definition of management suspect. I return to this point in detail in the 20 hectare case study.

13. This is an estimate. Employment statistics do not distinguish between employment on large holdings and employment on small holdings. The figure of 11,000 was given by Densly (n.d.:10).

14. The objective of pruning is to remove all dead and diseased wood and maintain a balance between vegetative and flowering vegetation whereby maximum cropping is obtained without any debilitation. (Department of Agriculture, Stock and Fisheries, The Territory of Papua and New Guinea 1970) Under Papua New Guinea Highlands conditions trees give excellent yields from about the fifth to the seventh year after planting but thereafter, unless pruning is carried out, yields decrease steadily as the bulk of lateral branches and excessive vegetation growth increase. (G. Dick 1977:47)

15. A Department of Agriculture, Stock and Fisheries (DASF) pamphlet describes the multiple stem method,

Multiple Stem - The vertical framework is developed by capping the young seedling at about 15 inches from the ground. Two suckers then develop on
either side of the immediate cap cut and usually
other suckers will appear below. These suckers
form the vertical growths.

The usual practice is to obtain three or four
sturdy growths and have them growing up together
about the same size and of equal strength. Should
only two verticals develop from capping either one
or both of the verticals may be capped to produce
three or four verticals as desired. As the
verticals develop upwards the branches will be
interlaced in the centre of the tree. However, as
the verticals became taller, the weight of the crop
on their upper branches and the pulling of the
pickers to reach the fruit soon forces the vertical
stems to bend away from each other. Thus the
centre of the tree is opened up and the interlacing
branches are pulled apart. (Department of
Agriculture, Stock and Fisheries, Territory of

See also I. Downs (1966:9-13) for a detailed description of
pruning methods.

16. Note that increasing the efficient working of a machine and
increasing the rate of intensity of labour (surplus value)
are not the same thing.

17. To say that payment for labour power is based on what is
'socially necessary' is important for this highlights a key
assumption of Marxist theory and that is that labour power, a
commodity which exchanges in a market place, does so at its
full value at the level of circulation. 'Socially Necessary'
factors include, the accumulated history of wage bargaining,
state legislation of working conditions and other moral
factors all of which are incorporated in the wage'. See Marx
(1954:479) where the major propositions are summarised.

18. Marx wrote,

The process, therefore, that clears the way for the
capitalist system can be none other than the
process which takes away from the labourer the
possession of his means of production; a process
that transforms on the one hand, the social means
of subsistence and of production into capital, on
the other, the immediate producers into
wage-labour. (Marx 1954:668)
19. We must not be misled by latter-day myth-making which gives the impression that there has been only a recent awareness that wage levels are too high in PNG. A World Bank Report (1978) states

Although the DPI and the fifty-year old planters association of New Guinea are becoming increasingly aware of PNG’s high labour costs, this problem deserves considerably more attention than it has so far received if PNG is to avoid a profit squeeze that could make it a marginal producer in certain crops. (The World Bank 1978:159)

In fact labour costs have always received a considerable amount of attention from planters.


21. Under this system the worker is paid at a specified rate per unit of output in terms of, for example, 1/2 cent per unit of output in terms of, for example, 1/2 cent per pound of coffee cherry or 25 cents per bag of cut copra. If a worker picks 50 lbs of cherry in a day he/she receives 25 cents: if he/she picks 180 lbs of cherry in a day he/she receives 90 cents. His/her earnings therefore vary in the same proportion as output. The most significant feature of a piece rate system under which a workers reward varies in proportion to his output is that gains or losses resulting directly from changes in his/her output accrue to him/her while gains or losses in overhead costs per unit of output accrue to the employer. A variation of straight piece work is the differential piecework system in which the rate is varied at specific levels of output. For example a system may pay coffee pickers per day, 1/2 cent per pound from output up to 150 lbs. For the next 60 lbs the picker receives 3/4 cent per 11 and for any output above this (i.e., above 210 lbs) the picker receives one cent per pound. If a picker achieved an output of 220 pounds in a day, he/her would receive a payment of $1.30 which is made up of 150 pounds at 1/2 cent per pound (75 cents), 60 pounds at 3/4 cent per pound (45 cents) and 10 pounds at one cent per pound (10 cents).
For more on this see, 'An Outline of Piece Rate Systems in Labour (a paper prepared by the Department of Labour, Territory of Papua and New Guinea. Reprinted in New Guinea Highlands Bulletin, October, 1968.

22. At harvest time the labour force may be strained to its limits and there is no-one to spare for weeding and such like tasks without doubling the labour force, a practice which is not easy when the people know they are to be engaged only for a short period. In some countries however it may be possible to engage women and children for picking coffee at lower rates of pay, and thus keep the higher paid and more permanent staff on work that is more skilled. (Haarer 1962:251)

23. A problem of piece-work on coffee plantations is that there is a large range of jobs which do not lend themselves easily to piece rate payment. This means that those engaged in other tasks are paid at day rates but are working alongside piece rate workers. The existence of piece rates, especially if it appears that piece rate workers are indeed being paid at a higher rate, can cause dissatisfaction among the regular workforce. There are numerous technical difficulties in piece rate schemes on plantations in the Highlands. In a situation of labour shortage, piece rate schemes have to provide not only an incentive to raise earnings but also a guaranteed minimum of earnings. Or as the Department of Labour preferred to put it:

workers co-operation in the implementation of a piecework scheme will not be forthcoming unless the scheme appears equitable to them. In this respect it has become an accepted principle in piece rate application to guarantee the worker a rate which will provide a minimum wage. (New Guinea Highlands Bulletin, October 1968:13)

But this principle creates great difficulties when setting the rate because some workers will perform below normal - the yardstick for measurement is generally taken to be the performance of a 'normal worker' working at his normal pace under normal conditions - yet have to be paid a minimum wage.
Also many variables (climate, terrain, type of crop etc.) attach to the several plantation industries and to individual plantations in the Territory, hence there is no standard output applicable to workers in a particular industry or even on a particular plantation (New Guinea Highlands Bulletin, October 1968:13). For these reasons the Department of Labour recommended that each plantation manager engage in an exhaustive and continuing examination of work methods so that an accurate rate for piece workers is found. Such a process would be costly and time consuming and unlikely to appeal to many plantation managers.

Piece rate systems also have the disadvantage of increasing administrative costs on plantations,

Administrative costs tend to increase for significant increases in output. This results from the need to keep output tallies for individual workers and also comprehensive data relating to earnings and the output/labour ratio. In general, although administrative costs may rise in absolute terms, rising productivity could well result in stable or decreasing administrative costs on a per unit basis. (New Guinea Highlands Bulletin, October 1968, p.17)

Further difficulties from the planters point of view with piece rate systems and one which fully indicates how difficult it is to define in terms of skill the nature of harvesting as an activity, is that the piecework trials found 'those who picked well were not capable of being distinguished by any age group, experience or other similarity' (New Guinea Highlands Bulletin, April 1965:13). A survey of 675 plantations carried out by the Department of Labour in 1965 showed that only 151 or 22% of plantations surveyed operated some form of piece rate system (New Guinea Highlands Bulletin, October 1965:12). This was probably a result of these various hidden costs and social difficulties. It occurred in spite of the fact that trials showed the incentive system reduced the time taken for the harvest by 25%.
24. In the above-mentioned trials, such practices were not widespread for out of over 300 pickers only.

Four pickers forged weight receipts, three stole other persons weight receipts, twelve lost their copy of the weight receipts and two removed themselves from the job without bothering to collect their payment even on the final day. (New Guinea Highlands Bulletin, April 1965 p. 15).

But the problem was considered serious enough for the Department of Labour to issue a general warning,

In the territory context, plantation industries may suffer from damage to the crop and also to the rye through carelessness on behalf of the picker. Therefore adequate instruction to employees and periodic inspection must be an integral part of piece work schemes in the territory (New Guinea Highlands Bulletin, October 1968, p. 17).

25. The empirical information upon which the following section is based is drawn from a range of surveys conducted during the colonial and post-colonial period (e.g., Dick 1977, Anderson 1977). However, it must be noted that it is commonly agreed that the store of information on smallholder coffee growers is very limited (Richard Doery, DPI, Personal interview, 10/5/82). Each year from 1972/73 The 'Rural Industries' Bulletin from the Bureau of Statistics has contained a proviso along the following lines 'This issue of the rural industries' bulletin contains less information on production for small holdings for some years than on others because it has not been possible for the field staff of the Department of Primary Industry to compile for all years estimates of cropping activity for the numerous, widely scattered small holdings.

26. Bernstein sets down in theoretical terms the relationship between the simple reproduction 'squeeze' and the intensification of labour. 'The objective of the simple reproduction 'squeeze' is to act as one of the mechanisms intensifying the labour of the household to maintain or increase the supply of commodities without incurring any costs of management and supervision of the production...
process' (Bernstein 1977:65). He continues 'It is necessary to introduce the concept of intensification of commodity relations which can help distinguish the various ways in which and degrees to which, peasant production is constituted and household reproduction realised through commodity relations. In any concrete analysis this entails consideration of the extent and forms of capitalist development of the economy of a social formation as a whole, that is, examining the place of peasant production in the social division of labour, its relations with other forms of production including capitalist agriculture and industry. The overall development of the circulation of commodities and money and so on. At the level of household economy the intensification of commodity relations refers to the degree to which the reproduction cycle is realised through the production and exchange of commodities (Bernstein 1977:66). Later, Bernstein adds a further aspect to the concept of intensification of commodity relations. He writes, 'Differentiation in class terms is another dimension of the intensification of commodity relations to be added to our previous observations, in that the homogeneity of the conditions of the household economy (as an economy of simple reproduction) is broken up as means of production are capitalised and labour power becomes a commodity, exchanged on a systematic basis within the rural economy. However, differentiation is not a necessary condition nor effect of intensification of commodity relations - this will depend on the concrete conditions in which intensification occurs (Bernstein 1977:68).

27. Average smallholder yields in the highlands are of the order of one tonne per hectare...the average total production per grower is around 200kg dry parchment for the highlands. (Densley n.d.:9).

28. The reasons given for this are somewhat paradoxical Anderson writes, 'It is not DPI policy to encourage smallholder usage of fertilizer and it is unlikely whether such applications would be beneficial under the small holders low level of
management. Were the cutting of shade to result such actions would be disastrous for it is unlikely (and unreasonable) that smallholders would maintain sufficient fertilizer applications in times of low prices'. (Anderson 1977:15)

29. Paid labour was reported to be used by one third of the interviewed growers. This is probably an under estimate for interviewers put insufficient stress on the question in at least two villages. When labour was incurred the average cost was K18.40 clearly the largest cash cost ... growers with a large number of children were in less need of hiring labour than others particularly growers with no children. (Anderson 1977:22)

30. It has been argued by both Gerritsen (1975) and Good and Donaldson (1980) that acquisition and/or use of Bentall pulping machines by coffee smallholders is a significant factor in the differentiation of the peasantry. There are at least four reasons why it is not correct to see ownership of a coffee pulper as a further determent of class location within the peasantry. Firstly, it is by no means clear that the provisions by some peasants to others of access to a pulper is always a monetary arrangement. It seems likely that in many villages use of a pulper is a reciprocal arrangement which might generate an obligation on the part of the user but would not substantially alter his social standing. Secondly, Andersons' survey upon which Good and Donaldson's view is based and Gerritsen's empirical work were all done in the early 1970's when coffee pulpers were rare and expensive items. Since the coffee boom of 1976/1977 coffee pulpers are to be found everywhere in the highlands. Bentall pulpers have a long life so once purchased they continue to service growers. While this proliferation of coffee pulpers may not have been on the basis of individual ownership the large numbers of pulpers do mean that many people have access or choice of access to pulpers. Given this degree of access price of use has fallen so that on money terms the ownership of coffee pulping machines is not likely any more to add to differentiation within the
peasantry. Another problem with this stress of ownership of pulpers as a factor differentiating the peasantry is that control of processing equipment, as we will see in the next section on marketing, is not a vital pinch point in the marketing chain. Gerritsen himself admits that control of buyers and curing plants is much more profitable than control of village pulpers (Gerritsen 1975:25) It is at these points of control that big peasant interests are likely to focus their activities in such a way that results in growing differentiation of the peasantry. Finally, the argument that occurs as a result of ownership of pulping machines assumes that monetisation of access to pulpers is the same as commoditisation of the relationship between owner of the pulper and the hirer. But unless the pulper-owner lives off the earnings of pulping and maintains the pulper as a specialist might to exploit those who must sell labour or commodities in order to hire the pulper then it cannot be assumed that this monetary relation is a commodity relation. In the villages of Papua New Guinea there are no specialist pulpers or hirers of pulpers and this along with all the above reasons make it unlikely that differentiation within the peasantry has much to do with coffee pulping machine ownership.

31. The following calculations of the overall distribution of household labour are made not solely on the basis of man-days required to get the coffee crop out. The aim of the analysis is to show that the household is poorly rewarded for a crop upon which its reproduction depends. Thus a calculation of the overall labour commitments of the household is more relevant than a calculation of labour time invested per man-day.

32. It is interesting to note how roundly smallholders are condemned by those in authority when they make such a decision. Prime Minister Julius Chan in a 1981 speech implied that the smallholder was 'lazy' and 'unreliable' and accused the smallholder of a stubborn reluctance to use land which holds back development 'and it is development alone that brings the good things of life?' (Allen 1982:4)
33. Devalorisation is a permanent feature of household production as Wheeler has also recognised although his calculations are not so detailed and probably underestimate the extent to which smallholder households are squeezed. Wheeler writes,

The Department of Primary Industry has analysed the returns expected to accrue to smallholder coffee producers participating in the Southern Highlands Area Development Project. This analysis reveals that at the forecast FOB price of K1340 per tonne a gross annual income of K130 is earned per farmer. Returns to labour are K3.15 per man day considering only harvesting and maintenance inputs or K1.04 per man day if the labour requirements of clearing, planting and maintenance prior to bearing are considered. By comparison with the rural primary wage of K1.95 per man day, the smallholder coffee grower is relatively disadvantaged. (Wheeler n.d.:13)

34. Significantly, for the later change that occurred in the destination of Papua and New Guinea coffee when the bulk of it went to West Germany rather than Australia, the shipping freight charges for coffee to Australia were never very different from the charge for shipping Papua and New Guinea coffee to Europe. 'Shipping freight from Lae to Madang to Brisbane, Sydney and Melbourne was quoted at 12 Pounds a ton. The majority of plantation returns showed that generally 14 Pounds a ton (1 1/2d. lb) was charged...Sea freight to European ports is quoted at 15 Pounds sterling a ton (A18/15/0)'. (Bureau of Agricultural Economics 1961:67)

35. 'In practice the individual costs were by no means consistent for each shipment. The main factors affecting the charges were delays involving demurrage and storage, repacking, distances carted, the different rates charged for agents services and freight rates for the different destinations'. (Bureau of Agricultural Economics 1961:65)

36. The analysis is applied to the Eastern Highlands. In Chimbu, by contrast, the market structure at the processing pinch point was completely different, based on monopoly control of processing by the Chimbu Coffee Cooperative.
37. It is often argued that competition between roadside buyers is so fierce that smallholders can bid up the price and are in fact in control of the transaction. An 'anonymous' letter to the Post Courier of 21 June 1978 said,

as I was watching in a village in the highlands, coffee buyers were driving past the village buying parchment at different prices. To me this showed that there was competition among the buyers themselves. The producer, knowing this, goes for the highest price offered for his parchment. During this transaction what the buyer did was check if the beans were dried and not all the contents of the entire bag. Often one-quarter of the bag is filled with malformed not well fermented beans along with other foreign matter. If you tell a villager to get rid of them he tells you, 'Larim em Bilong Hapim Hevi'. In other words he means to leave them so his bag’s weight is increased and he gets the maximum for it. At this point the buyer is being cheated because he doesn’t take the strict measures concerning the quality of coffee beans bought. Therefore as long as the price stays at its highest peak this is one of the main ingredients contributing to the low quality of coffee exported. (Post Courier, 21 June 1978)

38. This paraphrases Bernstein (1977:70) who in turn takes the point from Lenin (1964).

39. An editorial in the journal of the HFSA noted that,

Unless the investment policy is joined to a continuous plan to replace the dwindling group of expatriate owner-managers with a 'New Class' of substantial Papuan and New Guinean estate owners most of the middle income properties will disappear by being absorbed by bigger company organisations. We will then be left with an even wider gap – between only huge expatriate estate owning groups and miniscule peasant farmers. This is the type of situation which has led to violent expropriation in newly self-governing countries, generally followed by mismanagement and damage to valuable properties because those who have taken over have not had the intermediate benefit of experience in managing anything larger than a peasant plot. (New Guinea Highlands Bulletin, July 1968:7)

40. Good and Donaldson write,

The effect of this unequal control over productive resources or incomes is dramatic. In 1960 Finney’s ten selected leading businessmen obtained a gross
average income of more than $4,500 per annum with several enjoying more than $10,000. Today there are several whose net income is over K20,000. The per capita income in Goroka in the late sixties was about $25 per annum. Over a wide area in 1973 the average return from coffee after expenses was only $10.15. Due to world shortages of coffee and consequent price rises however the average peasants income in 1976 was briefly perhaps much larger. (Donaldson and Good n.d.:166)

41. Finney writes

A man like Soso, the first coffee grower mentioned in this section, and a man like Sinake would seem to represent very different types of entrepreneurs... However, the apparent differences in the way Soso and Sinake started their careers should not be given too much weight lest they obscure the subsequent convergence of their entrepreneurial styles and the status levels they achieved upon becoming successful coffee growers. (Finney 1973, 98,99)

42. One could possibly include the role of local government councils in the group of new institutions however the role of the councils was severely limited in terms of sponsoring business activity. This is one reason why they failed as institutions as Townsend writes

another important change in the social organisation came with the formation of local government councils. This was a development from the system of village officials intended to encourage cohesion, local responsibility, and collective action in area improvement. Despite the efforts of countless officials and local promoters the purposes and functions of councils were never properly understood. The peoples aspirations were towards bisnis and material rewards and they invested grand expectations into each of the successive and sometimes overlapping innovations including councils. (Townsend n.d.:19)

43. By definition middle peasants are dependent on other classes.

'Middle' peasants are able to reproduce themselves through family labour and land but in specific relations with other strata of the peasantry and with other forms of production. It is these
relations through which middle peasant households are constituted which determines their relative stability or instability of the reproduction of a middle peasantry. (Bernstein 1977:67)

44. Finney, who does not differentiate between the two groups, labels all his ten business leaders - including those of the middle peasantry - Schumpeterian entrepreneurs although with the difference 'that they operate with one foot in a traditional (albeit changing) New Guinean society and one foot in the cash economy' (Finney 1973:107). A closer analysis of the middle peasantry shows, however, that their structure-in-production limits their development in ways not shared by Finney's other entrepreneurs. In their relations to their clansmen the middle peasants grew more dependent on their goodwill and support over time. People like Sinake, Bono and Bimai Noimbano carved plantations out of communal village land. This was land which sometimes, as in the case of Sinake, required the co-operation of three separate clan segments to allow the land to be used as a plantation (Finney 1973:111). This involved Sinake in challenges and disputes to his land which were much more serious than anything suffered by European plantation owners. Villagers tended to see plantations set up by clan members on clan land as extensions of the village which they hoped would operate as hedges against the vicissitudes of village life and smallholder production. The middle peasants accepted this view for, as Bono told Finney of his relationship with those clansmen who had helped him get started,

when these people are in need, I give them some money because they helped me with coffee. All right, now I help them well-by buying some food when they are short, by buying meat, buying rice and by giving pigs at a feast. (Finney 1973:93)

The middle peasants probably had no choice. Their land remained available to the clan on a reciprocal basis and this often resulted in the breakup of middle peasant plantations on the death of the middle peasant as happened with Bimai Noimbano's plantation (Finney 1973:104). Reciprocal obligations to the clan included the provision of goods as in
Bono's case or an extensive role for clansmen in the running of the plantation. Gradually land and labour came to be traded within the clan between middle peasants and clansmen in a complicated series of debts and obligations. The solely commercial aspect of the plantation was modified by clan requirements. On many indigenous plantations

Gorokan entrepreneurs who started out using cash wages to employ labourers also found that as their success became apparent they were able to recruit clansmen to work for them, offering them, as Soso and Bono did from the beginning, leadership and reciprocal gifts instead of regular wages. (Finney 1973:99)

While this may have represented a wage saving to some Schumpetarian thinkers the actual loss in wage discipline that results from the use of non-wage bargains affected the fortunes of the middle peasants. Today, a visit to Sinake's plantation reveals a fairly run-down plantation. The coffee trees are more similar in appearance to those of smallholder gardens than to plantation trees. The clansmen live and work on the plantation giving it a village-like atmosphere, although Sinake himself retains his status by living separately in a planter-style house.

45. Finney (1973) contrasts middle peasant and European plantations in these terms. He writes

European plantations are large-scale operations which are tending to become ever larger as corporations buy up and amalgamate smaller properties and as plantings are extended to the limits of the leases. European plantations also usually possess their own coffee mills or have their coffee processed in mills with which they are financially associated. In contrast, Gorokan plantations are typically small and most of the growers sell their semi-processed coffee to European firms which complete the processing and sell the product to European export firms. Even the largest Gorokan holding, the plantation of Sinake Giregire which in 1970 had about 40 acres of planted coffee is small compared to the largest European coffee estate in Goroka, a holding of about 1000 acres, made up of several of the original settler plantations that have purchased and amalgamated by a large trading and plantation corporation. (Finney 1973:159)
46. Finney writes

Until recently Gorokans received virtually no government sent aid and financing for setting up their businesses, in fact, many of the Gorokan pioneers in business say that administration officials looked askance at their efforts and tried to discourage them from investing in non-agricultural enterprises arguing that their money was better spent on improving their land, developing new crops, building modern houses and buying modern furnishings and clothes. (Finney 1973:73)

47. The Bureau of Agricultural Economics (1961) Report noted that

In the past year the Native Loans Fund Ordinance 1955 to 1960 has been modified to permit loans to be made to individual natives through the Native Loan Fund, although the available funds are not yet very great. In the absence of a clear individual title to the land special provision has to be made to ensure security, for example by paying approved loan money directly to creditors and arranging repayments through loans on the crop. Such loans have been rare for agricultural purposes. (Bureau of Agricultural Economics 1961:61)

48. As distinct from the devalorisation at the level of production which is also happening as I have shown in the class location section.

49. My task in this section is not to study the coffee policies of the colonial state in the state's own terms but to study the effect the form and function of the colonial state had in constituting class struggle in the colonial coffee industry of Papua and New Guinea. Thus I will not assume that the branch of the state - DASF in this case - designated by the state itself as the branch with primary responsibility for authoritative functions in the area necessarily governs or controls coffee. I will not undertake a coffee policy study if that involves the tracing of plans and policies for coffee development of the role of DASF, the implementing agency. Such an approach is sensible from the viewpoint of the researcher for it is only in departments of the state that comprehensive files are kept
'and where public access is at least possible. Sometimes, however - in fact most times if the case studies below can be generalised - the branch designated by the state to take primary responsibility for rural development plays a minor role in state-society processes in the countryside. The problem of studying coffee development from the state's own viewpoint is that it can be very difficult to break out of the logic of the policy process itself, that is, to move away from questions of policy goal setting, policy implementation and policy evaluation toward a study of state-society relations. An industry study such as the present one, and especially one that begins with a study of class location and class relations and not a state policy, must overcome this problem.

50. Politics in the Eastern Highlands did take the form of regional and national politics and it should come as no surprise, after the preceding analysis of class, that the tussle for indigenous representation in Eastern Highlands was mainly fought out between representatives of the middle peasantry - Sinake and Soso - and village politicians or smallholder representatives such as Sabumei Kokifai. This electoral politics commands the attention of most political scientists but unless the politics is linked to and informs the material base it is usually of little interest or importance. In the colonial period, electoral politics hardly affected the politics of coffee so it will be largely ignored in the following account.

51. A case in point is Mio Mole, a member of the Coffee Industry Board in 1982. Enoch Mio Mole owns a large coffee plantation but he is described in CIB handouts as a smallholder. See Daily News Brief, 14 August 1979.
The decade of the 1970's in the coffee industry of Papua New Guinea was one in which the political fortunes of the dominant classes continued to be vitally affected by the flow of world coffee. The principal contradiction which governs domestic coffee industries is that a way must be found, usually via the state, to balance the limits to the expansion of coffee, which result from international quota and market limitations, with the need to develop the productive forces inside the country to enhance private accumulation and state revenues. The resolution of this contradiction proved as difficult in the 1970's as it did in the 1960's.

The external marketing problems of the crop evident in the 'netting' crisis of 1966/67 finally demonstrated that these problems would remain insurmountable under existing colonial arrangements. In 1972 a new 'netting' crisis arose when PNG production again exceeded Australian consumption. The PNG surplus could not be sold overseas during a world surplus, and surplus production had to be stockpiled and funds made available to advance to growers and to finance storage. The CMB managed to get approval this time for a loan from the Reserve Bank of Australia and this helped relieve some pressure on some growers. However, plantations were having severe problems including a general increase in costs (especially labour), export taxes and low prices. When these were added to their worries about independence many white planters came to regard the 1972 crisis as the last straw. Thus in the early 1970's most white planters began winding down their plantations as a prelude to their departure.

The timing of the departure of the white planters in the early 1970's was opportune for the two class fractions, the petty bourgeoisie and the big peasantry which emerged in the mid-1970's to dominate the industry. Their formation coincided with the 'Black Frost' in Brazil in 1975. This created a worldwide shortage of coffee and boom conditions throughout the coffee producing world in 1976 and 1977. The coffee boom provided an
unprecedented opportunity for the petty bourgeoisie and the big peasantry to consolidate as a class. It also relieved the industry as a whole for a few years of the problem of finding a market for the crop. The main change in the class structure in the 1970’s was the emergence of local dominant classes and their differentiation into dominant class fractions made up of a petty bourgeoisie and a big peasantry. Following Poulantzas (1978) fractions are understood as competing segments of the dominant classes in circumstances where the subordinate classes remain unorganised at the political level. Competition between fractions is real for, as Poulantzas notes, fractions, to the extent that they become autonomous are capable of constituting themselves as social forces (Poulantzas 1978:84). The important point about this definition is that class fractions have different structures in production even though fractions may share a deeper antagonism to subordinate classes. This will be shown to be the case in post-colonial Eastern Highlands.

Donaldson and Good (1980) who have done much of the critical and interpretative work on the post-colonial coffee industry in Papua New Guinea recognised the change in the local dominant classes. They write that perhaps the most striking development in the Eastern Highlands has been the taking over of the plantations by Papua New Guinea business groups. (Donaldson and Good n.d:54) but they do not adequately account for the emergence of class fractions within the new dominant class. Donaldson and Good argue that there are different ‘elements’ within the ruling class which they call a rich peasantry and a class of rural capitalists. However, their analysis is often confusing as they use labels for the various classes which are frequently swapped and changed.

Donaldson and Good’s ’class’ analysis ignores surplus value and production altogether. ‘Class’ in their analysis is very similar to the static usage adopted by stratificationist theorists and is based more on inequities between individuals than on class location as established in a structure-in-production. Of these inequities they regard the hiring of labour as a key feature but
they do not go further and analyse how labour is used in production to appropriate either absolute or relative surplus value. For this reason, Donaldson and Good find similarities within the dominant class where they should find differences; they lump class fractions together and argue for example that 'those who run the Development Corporation form the leading element of the rich rural classes' (Donaldson and Good n.d.:167).

Thus the difference between Donaldson and Good’s analysis and the one I will offer in this section is not merely terminological, for the fundamental emphasis in the two analyses is very different. Donaldson and Good’s in their analysis seem to want to show that in the end the real conflict in the coffee industry is between the rich rural classes and the mass of the peasantry. However I will demonstrate that along with the class struggle the emergence of differentiated class fractions from within the dominant class and the class conflict between these fractions helps to explain not only the maintenance and strengthening of the Bonapartist role of the CIB in the post-colonial period but also the limits which are imposed upon these class fractions as they attempt to roll back the boundaries of subordinate classes in the industry.

Coffee politics grew more complex throughout the 1970’s as the intensity of competition between the dominant class fractions increased. This intensity was the result of the external restrictions imposed upon the development of the productive forces and the fact that the dominant classes in the industry could not directly exploit smallholders. These restrictions forced the dominant classes to scramble over each other in an endeavour to devise newer and more creative ways of exploiting smallholders either by alterations to marketing channels or by gaining various types of state assistance. The dominant class fractions were not helped by the form and function of the CIB. The main change to the state which occurred in the post-colonial period, apart from the increased importance of electoral struggle as a means to political power, was that the regulatory agency of the state in the industry increased its functional autonomy. This occurred when the CMB was renamed the Coffee Industry Board (CIB) in 1976 and given control over a large stabilisation fund.
I argue in this chapter that this change did not alter the Bonapartist form of the state in the coffee industry. The new-look CIB may be an 'ideal' form of state for the dominant class in a competitive capital sector (see Chapter one) but the divisions within the dominant class blunted its usefulness to either fraction as an instrument in the class struggle against smallholders. In fact, the refurbished CIB was the creation of a social category, the technocrats, and did not emerge as a reflection of the processes of class struggle or class conflict in the industry. The coffee stabilisation fund, administered by the CIB, is a part of the macro-economic strategy of the post-independence government and was not established for the coffee industry at all.

DECOLONISATION AND THE TRANSITION TO POST COLONIAL POLITICS IN THE PAPUA NEW GUINEA COFFEE INDUSTRY

Decolonisation is a political process which may or may not have effects on a structure-in-production or class formation and which may not cause substantial alteration to the form and function of the state in an industry. Decolonisation of the Papua New Guinea coffee industry did not alter the structure-in-production in the industry. The coffee industry continued to be dominated by two types of production units (or class locations): plantations and smallholdings. Colonialism in the industry may have disappeared but exploitation did not. Yet the process of decolonisation did sweep away the whole structure of control and influence over the industry by the Australian metropole at both external and internal levels. This chapter begins with a description of the decolonisation process in the coffee industry of Papua New Guinea, designed to set the scene for a more rigorous analytical study of post-colonial class locations, the form and function of the post-colonial state and class relations in the post-colonial coffee industry.

The 1972 Crisis in the Coffee Industry

The 1972 crisis was the final straw for most white planters as it showed that existing colonial structures and relations could not survive extended periods of international regulation. It was
apparent well before the 1972 crisis began that Australian colonial control no longer helped the PNG industry in its international coffee relations. This was the case not only because the Australian connection tied PNG coffee to Australian imports, 'netting', but also because Australian representatives at the ICO made decisions which were, from the PNG viewpoint, arbitrary and unsatisfactory.

The ongoing 'netting' problem which occurred in 1966/67 was exacerbated by the fact that in the renegotiation of the 1968 ICA Australia failed - despite high-level representations to Brazil - to have its single importing membership status (and therefore PNG's export quota) increased by at least the 5000 tons that was in storage from the 1966/67 'netting' crisis (Cartledge 1978:179). A feature of the changes in working out basic quotas in the 1968 agreement was a cut-back in the relative share of the total basic quota of big producers and the promotion of increased production in small countries such as Tanzania and the Ivory Coast. That PNG should miss out on increased quotas when many other small countries were getting them was inexplicable to many in the PNG industry and, coupled with the worries of the 1966/67 crisis, threw the PNG industry into a state of near-panic. There were exaggerated predictions of a surplus' '.5000 tons annually in 1972/73' (Cartledge 1978:187) if Australia/PNG remained in the 1968 ICA. There was, however, little real consideration given to the idea that Australia and PNG might leave the ICA. This is not an option for most small producers and importers because the dominant bilateral oligopolists in the Agreement can ensure that much of the market is accessible only to those in the Agreement.

In the first half of coffee year 1971/72, after September 1971, disaster struck the PNG coffee industry. Following the reduction in world export quotas by the ICO the amount of coffee export stamps allocated to PNG in the first half of the 1971/72 coffee year was reduced by 13%. These stamps were soon utilised with the result that none were left to cover coffee exports up to the end of March 1972 to category A countries; exports to Australia did not require stamps (Reserve Bank of Australia 1971:5). This situation would add at least 1000 tons to the surplus stocks.1
The possibility that the PNG coffee industry might have to store some 16,000 tons, when exports totalled only 27,000 tons, reflected badly on Australian administration. The Administration and the metropolitan state had been aware of the problem since 1966/67 but had taken virtually no steps to plan for the obvious difficulties the industry would face when it began to breach 'netting' every year. Stocks could not build up forever. But the Administration seems to have been unable to plan for the export of PNG coffee in a way that did not include 'netting'. Rather than acting boldly to break the nexus between PNG production and Australian consumption and presenting PNG with its own quota in the ICO, Australian representatives took the view that they ought to be careful not to attract attention that might lead to examination of the Australian/PNG single importing membership status (Cartledge 1978:197). They thus acted to ensure the continuation of the very arrangement that was the cause of all PNG's difficulties.

White planters were in no position in the early 1970's to be able to finance the stockpiling of half PNG's total production. Prices were falling and costs were rising. The fall in international prices in 1970/71 and the virtual levelling out of the international price until 1975 (Figure 2) was accompanied in 1970 and 1971 by the actions of Australian importers who, taking advantage of the troubled conditions in the PNG coffee industry and assured of a guaranteed supply of coffee if not from PNG at least from other sources, began paying prices of up to 5 cents below parity for PNG coffee (Reserve Bank of Australia, 1972). This was eventually stopped by the Administration and the metropolitan state in March 1972 but it did add to the difficulties of the PNG coffee industry.

The planters were also beset by increasing costs, particularly labour costs, which rose dramatically in the period 1970 - 1975, with substantial jumps in the average earnings in 1971 and 1974 (Table 9). Both these increases occurred in years 'just after which the rural minimum wage had been increased' (Jackson 1981:115). Of these two increases in average earnings, the 1971 increase was probably more difficult for planters to bear even
though as Table 9 shows the money value of the 1971 increase in average earnings was less than the 1974 increase. This is because the cash component of the minimum wage increased by one-half in 1971 (Jackson 1981:110). This tested planters’ liquidity. This compares with the situation in 1972 when the switch to the all-cash wage was accompanied by a fall in real wages until 1977 (with price inflation taken into account and deflated by the 'product price' as measured by the export price index excluding copper concentrate, (Table 12). Also from 22 August 1974

the Minimum Wage Board No. 4 of 1974 introduced a two-tier rural minimum wage: a lower wage of K8 for the 'primary industry' of copra, cocoa, tea, coffee, rubber, oil-palm, fruit, vegetable and livestock raising industries, and K10 for all other employees. (Jackson 1981:109)

Thus planters received some relief from increases in the minimum wage due to both inflation and the two-tier system in the years 1974 - 1977 which they did not receive in 1970/1971.

In March 1972 discussions finally began between the CMB and the Australian government on how to deal with the PNG coffee crisis. The whole process of negotiation and decision making was marked by a crude assertion of colonial control and authority by the Australian government over the industry. It was agreed that there was only one possible way to deal with the over-supply problem. This was to adopt the solution proposed in 1966/67, for the Reserve Bank of Australia to provide a loan to the CMB to purchase and store the crop and to provide advances to growers. The plan that was proposed by a working group was that

a loan of $2.5 million would be obtained for CMB which would buy in 6,000 tons of the surplus stock at prices as close as possible to world parity. Purchases would be spread over the September and December quarters of 1972. The coffee purchased would be held for disposal as sales are arranged at discount prices in Annex B countries. (Cartledge 1978:207-208)

The loan was to be repaid by increasing the export levy from .5c to 2c per lb in July 1972. The .5c levy was originally intended merely to provide for the operations and expenses of the CMB but
it was now seen as a mechanism by which surplus stockholding and disposal schemes could be financed (Reserve Bank of Australia 1972:6). This cost would be passed down the marketing chain and would be borne by growers in reduced prices paid for their produce at both the processing and export pinch points in the marketing chain. It was a condition of the loan that it be paid back as quickly as possible. Though the 2c per lb levy was a heavy cost to bear this did mean that the loan could be repaid by July 1973.

While most of the stored coffee was subsequently sold in 1972 and 1973 to Annex B countries (Densley n.d.:17) and the loan was repaid, relations between the CMB and the colonial administration were soured by the crisis of 1972. Along with all the areas of dissatisfaction which the CMB had with the way the crisis was handled, the Australian Government took a good deal of time deciding whether to actually provide the loan (Cartledge 1978:209). The loan itself and its short-term conditions put enormous pressure on the CMB to find markets for the surplus crop. This was not an easy task in a tight international market. At the same time the future of international regulation was uncertain. In December 1972 the 1968 ICA finally collapsed although the lifting of quotas did not relieve the problem of global marketing for individual countries. The coffee years 1973/74 and 1974/75 were extremely difficult for all producers, including those of PNG. Marketing difficulties were not relieved until the Brazilian ‘Black Frost’ of July 1975, which resulted in a loss of some 20% of world coffee supplies.

By the time the effects of the ‘Black Frost’ were felt with the worldwide coffee boom of 1976/77, most of the white planters in the PNG coffee industry were gone. Table 11 shows that a large number of coffee plantations changed hands in 1975 and a number of others were taken over at the height of the boom in 1977. The change of ownership had its cause in the white planters’ response to the problems in the industry. Naturally the morale of the white planters was affected by all the disturbances in the industry. Their difficult economic circumstances further undermined their commitment to the industry. Their response was to make short-term plans to maximise their returns from the industry and to sell their properties when the price was right.
This short-term strategy took the form of maximising production by cutting shade and increasing the use of fertiliser. The short-term actions of the white planters in the coffee industry did not adversely affect the new plantation owners in the 1970's but it showed up some years later when in 1980 some Western Highlands plantations experienced dieback. The specialist who investigated the problem said that shade should be re-established on the plantations (Post Courier July 10 1980; Kula and Clarkson 1980:199). Apart from this episode however, the departure of the white planters from their plantation base occurred almost without incident or ceremony.

Transition Politics – The 1972 Election and the Political Demise of White Planters

The social power of the white planters in the coffee industry of colonial PNG stemmed from their powerful class location as planters in control of the most advanced unit of production in the industry (plantations), and from their control over crucial market pinch points. Control over market pinch points meant the planters could set their own class boundaries and those of other classes. The planters also had political power and influence in the social formation as a whole. This political power gave them the potential to act subjectively to roll back the boundaries of other classes in a way that advanced white planter class interests.

Their political power was exercised through the Highlands Farmers and Settler Association (HFSA) and personal influence. Key individuals like Downs used their personal contacts within the Administration and throughout white colonial society to promote the coffee industry and the interests of white planters. Downs could exercise extraordinary influence. In one instance he had the Administration and the Australian government back him as a member of the delegation to the ICO, despite opposition from the ICO itself. The white planters also maintained connections with the formal political representatives. Wolfers notes that

The Highlands Farmers and Settlers Association, and the various chambers of commerce, planters and graziers associations were more obviously organised to further
specifically expatriate economic interests. Their secretaries and other officials tended to meet, and to politic, with men who spoke the same language as themselves in every sense of that expression. The expatriate members of the House of Assembly, and especially the Regional members among their number, therefore tended to act as brokers on behalf of these indigenous members from their Districts who did not openly resent their dominance or were not members of the Pangu Pati. They linked the increasingly important politics of and for Districts, even across party lines with the issues and interests of national politics. (Wolfers 1976:11-12)

However, in the period before July 1970 formal representatives played a minor role in a political system where executive control was still tightly held by the Minister and the Administration. Representatives were to be available for consultation, provide advice and give their assent to executive policy proposals but they were not expected to compete for political influence in the open arena of the House of Assembly.

All this changed in the 1972 election when winning the electoral struggle became as important in gaining access to political power as did associational political activity and individual influence. The crucial importance of the electoral struggle after 1972 meant that from then on it was only when formal political representation was conjoined with associational and individual action to a class base that it became possible for classes and class fractions to act subjectively and roll back the boundaries of other classes and fractions in class struggle. Political activity in the House of Assembly began to change between 1968 and 1970. Before 1968

the majority of the elected members of the House of Assembly were not firm adherents to a particular party but by mid-1971 it was clear that Pangu Pati with eleven members in the House of Assembly and organised branches in some towns and villages would be a force to reckon with in the 1972 elections. (Wolfers 1976:13)

Thus, for the first time in PNG a competitive party struggle was likely to take place in the 1972 election as other parties formed to neutralise Pangu.
The main party to oppose Pangu in the 1972 election was the Highlands-dominated, United Party. The most prominent nationals behind the formation of the United Party were Tei Abal, then Ministerial Member for Agriculture, Stock and Fisheries, and Sinake Giregire, then Ministerial Member for Post and Telegraphs. Tei Abal became leader of the United Party. Sinake was a coffee plantation owner, one of the most prominent middle peasants and the member for Eastern Highlands Open at the time. The general secretary of the United Party was Anton Parao from the Western Highlands, who later became one of the most influential coffee businessmen in that province. Thus with support in Abal's electorate of Wabag, which later became Enga Province, Sinake in the Eastern Highlands and Parao in the Western Highlands, the United Party covered much of the national vote in the coffee producing areas. However, the party was in fact shaped almost entirely by expatriates such as Ron Neville (MHA for Southern Highlands, Regional) and Bill Fielding (member for Northern Regional) (Ballard n.d.:11; Stone 1976:53). The United Party was financed by supporters in Goroka and Lae which included almost total support from white coffee planters including the father of the industry, Jim Leahy (Stone 1976:55).

The United Party did win the largest number of seats in 1972, 37, but this was well short of an absolute majority. It lost some of its prominent expatriate members such as Leahy. This reflected the general political decline of whites. Pangu won some 18 seats, People's Progress Party (PPP) 8 seats and the National Party 2 (later increased to 8 as the other Highlanders joined) (Ballard n.d.:12; Stone 1976:536). The United Party was outmanoeuvred by the Somare-led Pangu Pati, which joined with Chan of (PPP) and Okuk and Kavali of the National Party to form the first National Coalition Government.

The failure of the United Party in 1972 and the continued decline of the United Party throughout the 1970's - in the 1977 election the party won only 27 seats compared to 32 in 1972 - created a disjunction between the successful exercise of class power in the coffee industry by the dominant class fractions, the big peasantry and the petty bourgeoisie and their lack of overt
national political power. This disjunction had its roots in the electoral struggle of 1972 when white planters vainly tried to maintain their political power. The failure of the planters in 1972 I show in later sections, damaged the fortunes of the local dominant class fractions in the coffee industry until 1982 when these class fractions came into open electoral competition.

**Petty Bourgeois 'Nationalism' and the Role of White Technocrats in the Papua New Guinea Coffee Industry**

The failure of the United Party ended for many years the direct political representation in the national legislature of the dominant class fractions in the post-colonial coffee industry. This did not mean that coffee politics did not intrude upon national politics, that claims from within the coffee industry were not made for national resources. But it did mean that after 1972 these claims were again restricted to the political form of associational group action and individual representation and action. A disjunction grew between the economic power exercised by dominant class fractions in the Highlands coffee industry and the formal representation in the national legislature of parties and parliamentary coalitions. Even without formal political representation in the national legislature by representatives of the dominant class fractions in the coffee industry, the new government in Port Moresby was not able at any time to ignore the needs of the industry as a whole. This is partly because coffee is a large export revenue earner. But there were also political reasons why the new government could not ignore the needs of the new dominant classes in the coffee industry. The new government was a parliamentary coalition made up of a menagerie of petty bourgeois elements. These included Julius Chan, with his Islands trading interests, Barry Holloway and his Kainantu coffee interests and trade stores, Michael Somare and others, who later became interested in real estate and other service industries, and an assortment of teachers and clerks with a petty bourgeois outlook. They had no unified class location and they were elected at the time of the conjunctural crisis of decolonisation. As was shown in Chapter 1, acute conjunctural crisis usually triggers an attempt by the dominant class in the social formation
to achieve a degree of ideological integration. The purpose of this ideological integration is to show that the interests of all dominant classes in all sectors are linked. Ideological integration of this type was attempted by the new government in its appeal to Papua New Guinea nationalism.

Most studies of nationalism in PNG have assumed that it is to be understood as an aggregate concept usually described as a sense of national unity,

and because the first task of the new state is to create a sense of national unity, the ideology will be a nationalist one of some kind. (Sundhaussen 1977:310)

Rowley takes essentially the same view. He considered nationalism to be the working out of unity. It commenced, he argued, from the contrast of the New Guineans position with that of the white man in the country and he felt that unity was being worked out on the basis of common opposition (Rowley 1965:15). Such accounts usually see the absence of consistency or disaggregation within nationalist thought as evidence of the failure of nationalism as an ideology (Stewart 1984). But from a class perspective inconsistency or disaggregation within nationalist thought is to be entirely expected. From this perspective, nationalism is a set of ideas aimed at linking the interests of diverse classes. It affects classes differentially for just as nationalism may organise some classes it can disorganise others. It depends how the success or failure of nationalism is to be measured. In a country like Papua New Guinea it may be that the success and failure of nationalism is not to be measured by its consistency of thought or by the success of individuals like Somare to 'kindle a sense of nationalism' (Sundhaussen 1977:312), but by the extent to which its propositions and policy initiatives do begin to accommodate the interests of a range of dominant classes.

The new petty bourgeois national coalition government set about developing a sense of nationalism more for the purpose of organising dominant classes and disorganising subordinate classes than for reasons of consistency or ideology. Ideological
flourishes were not intended to encourage change in the production base. The government's major ideological statement was the Eight Aims, promulgated in December, 1972 and adapted from the Faber Report (Overseas Development Group, 1973) on PNG's development. Of the Eight Aims, the first and third aims have general relevance to rural industries. The first called for 'rapid increase in the proportion of the economy under the control of Papua New Guinean individuals and groups, and in the proportion of personal and property incomes that goes to Papua New Guineans' and the Third Aim was 'decentralisation of economic activity, planning and government spending, with emphasis on agricultural development, village industry, better internal trade and more spending channelled to local and area bodies' (Somare 1975:108-109). These aims might appear to be so general as to be little more than rhetorical flourishes. They have often been labelled 'failures' and mere 'rhetoric'. But Fitzpatrick (1982:6) argues it should be recognised that these aims were after all, aims sponsored by a national petty bourgeoisie. As such they could hardly be expected to offer a comprehensive radical alternative. Instead they should be seen as a range of programmatic, particular points. Seen this way, Fitzpatrick argues, the aims have been implemented with enormous, if selective, success (Fitzpatrick 1982:6). The following section will demonstrate the selective effect of petty bourgeois nationalism and petty bourgeois ideology on dominant class fractions in the coffee industry.

The new government attempted to put the third aim into operation in the coffee industry by revitalising the Department of Primary Industry (DPI – Department of Agriculture, Stock and Fisheries until 1976). In 1973 it announced a program to rejuvenate coffee extension activity and to embark on a modest coffee expansion programme (Densley n.d.:5). The government claimed to be interested in increasing the country's production so that PNG bargaining position in any new ICA would be strengthened. The industry however was still having a difficult time finding export markets, so the expansion program was described by the CMB as involving '...not so much specific targets as approximate ranges of opportunity' (Howlett, Hide and Young 1976:223). Most of the
expansion programme was aimed particularly at the lesser developed areas of Papua New Guinea and especially those areas such as the Southern Highlands which had not been encouraged to plant coffee because of previous policy (Densley n.d.:5). The total area to be expanded under coffee was 8000ha with DPI playing a major role in terms of distribution of seed and extension advice. In 1975 the government appointed a national coffee coordinator. After the decentralisation of DPI in 1977 it also established Coffee Development Teams (CDT). These teams were to be headed by experienced coffee extension officers. They were based in the main coffee provinces and were expected to liaise with the National coffee coordinator. The effectiveness of these officers varied but at least the government was being seen to devote some resources to the industry. The government also stepped up its provision of technical services to the industry and especially to the plantation sector after 1973 (McKillop, Williamson and Associates 1982:21). In short, in the period between self government and the decentralisation of DPI in 1977 the national government appeared to offer general support through DPI to the industry.

However the main effect petty bourgeois nationalism had on the industry was through the Plantation Redistribution Scheme (PRS). The PRS was an attempt to achieve the first of the eight aims in the coffee industry by facilitating the movement of Papua New Guineans into the control of plantations in coffee and other cash crop industries. The Plantation Redistribution Scheme was set up to provide interest free loans to clan groups to buy back European plantations in their areas. The PRS was touted as one which showed the new government’s commitment to the village because it would assist clan members to benefit from land previously denied to them by whites. It was also thought that the PRS would expand small scale commercial activity along Papua New Guinean and not Western lines and that it would be egalitarian and would, according to Mr Somare, encourage self reliance (Papua New Guinea House of Assembly Debates, 1972/73:1494-1495). The government’s public statements on the PRS presented it as a policy following closely the general policy on land adopted by the government from the recommendations of the
Commission of Inquiry into Land Matters (1973). The Commission of Inquiry into land matters believed that land policy should be evolved from a customary base and not be a sweeping agrarian revolution and that individualistic extremes should be avoided (Papua New Guinea Government Strategies for Nationhood 1974:57). The Committee was opposed to the demands made by large, indigenous coffee growers such as Sinake that land be convertible into permanent heritable estates (Ward 1977:6-7). The rhetoric presented the PRS as a progressive measure.

It is not difficult to show that the PRS was mainly effective in creating a climate whereby private purchases of plantations by commercial groups who were already potentially well off would take place (Munnall 1981:62). It certainly was not egalitarian in nature. This can be seen when it is realised that the PRS did not alter the structure of land tenure in the Highlands. It opened up opportunities for nationals to gain access to land privately held by whites and used as plantations. But it did not expand the stock of privately held land at all. In this way it merely retained existing structures and did not disadvantage big PNG growers or upset the existing system of communal landholdings. The PRS was not egalitarian for it did not contain any attempt to redistribute this privately held land to those locals most in need. Quite the reverse happened in fact. A group received assistance under the scheme provided they were a local group and not because they had special needs. In this way many established groups, such as those associated with Development Corporations got assistance under the scheme.

Indeed, the administration of the PRS virtually had to ensure that assistance went to already well off commercial groups for in this way plantation structures would be maintained and not broken up into small plots as many feared.

The PRS was narrowly conceived. It had very little effect on plantations owned by foreign companies such as Steamships Trading Co. as Table 11 shows. It also had very little effect on the coffee industry itself. In the coffee industry, little government assistance was needed either in terms of finance or assistance in negotiations because as we have already seen white
planters were eager to do a deal with nationals and get out of
the industry. Also, PRS funds were often not needed because
development corporations could draw on accumulated funds to pay
deposits or marshal village savings and some groups succeeded in
paying off plantations in the boom of 1976/77.\(^2\)

The nationalism of the petty bourgeoisie was further limited by
the role of the technocracy - the social category made-up of
technical advisors (usually whites) in all policy fields who were
so influential in the early independence period (see Ballard 1981
for their views). The technocracy is not a class because it does
not have a class location in production. Hence it cannot
reproduce itself. But the technocracy can exercise a profound
influence over the allocation of state revenue. The technocracy
share the antipathy of the national petty bourgeoisie to state
intervention in production but unlike the petty bourgeoisie,
which is afraid of the class effects of intervention, the
technocracy oppose intervention in production because their aim
is to immunise policy decisions from class struggle. This is
necessary if they are to achieve technical perfection in
policy-making. The technocracy realises, correctly, that state
intervention in marketing or production enhances the political
penetration of dominant classes and can give these classes
influence inside the technical divisions and co-ordinating policy
agencies of the state. The result can be a loss of power and
policy perfection for the technocrats and an increase in
political struggle inside the state.

In the transition period in Papua New Guinea a remarkable
alliance was established between the technocracy and the national
petty bourgeoisie.\(^3\) The continued refinement of policies and
policy structures by the technocrats was carried through while
the national petty bourgeoisie was politically dominant in the
legislature. These technocratic changes affected industries and
classes in all sectors of the economy. We will see below the
influence of the technocrats in the coffee industry through the
setting up of the stabilisation fund. The setting up of the
stabilisation fund in coffee involved the work of two consummate
technocrats, Ross Garnaut and Mick Wheeler. Garnaut, with others
in the Ministry of Finance (including the long-serving secretary of the department, Mekere Morauta) designed a macro-economic strategy known as the 'hard kina' strategy. This strategy involved setting up stabilisation funds as a hedge against variable export commodity prices (Garnaut 1981). Mick Wheeler of the Department of Primary Industry worked out many of the details governing the operation of the stabilisation fund in coffee. Other technocrats played a role which indirectly affected the industry. Land advisors such as Alan Ward and Jim Fingleton were influential in halting the drift toward individual land titles that had begun in the late colonial period. The absence of a private market in land has had an important influence on the class fortunes of many in the coffee industry as we will see in the class relations (subjective) section. McKillop of DPI played a role in influencing DPI to focus its activities less on plantations and more on small holdings. Less directly, technocrats like Tordoff and Watts, who influenced the design of the decentralisation process, and Hinchliffe, Allen and others in NPO (National Planning Office), who designed the NPEP system of allocation, played a role in creating state structures which continue to affect class fortunes in the various regions and industries in post-colonial Papua New Guinea.

The technocrats were able to exercise extraordinary power over state allocations and influence the creation of state structures mainly because of the quite unusual manner in which the ruling national petty bourgeoisie exercised political power. The national petty bourgeoisie controlled the formal political institutions throughout the 1970’s and the technocrats formed with them an alliance that gave them access to formal political power. However, the national petty bourgeoisie maintained formal political power mainly because they were hardly challenged during this period. There was no other class in PNG which was organised at the political (party) level. Hence the national petty bourgeoisie could rule with a very loose political organisation. Also, the national petty bourgeoisie did not at any point establish an organisational form which penetrated the state apparatus. They were at the helm of the ship of state, but they did not have control below the decks. This is an important point
because it means that the bureaucracy in the post-colonial state did not form itself into a politically active social category as it would have done had an organised party of the dominated class penetrated the state apparatus. The bureaucracy were also disorganised by the high functional autonomy in their post-colonial state. Decentralisation dispersed them through a range of institutions and expelled many of them to remote regions. Also, the bureaucracy underwent rapid localisation in the early years of the post-colonial state which added to its disorganisation as an influential social category. All this gave the technocracy a fairly free hand in the allocatory and co-ordinating branches of the state especially at policy levels.

CLASS LOCATION IN THE POST-COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

The process of exploitation and the structure-in-production did not alter in the post-colonial coffee industry of Papua New Guinea. The structure in production remains the same, based on plantation agriculture and smallholdings (though by the end of the decade 20 hectare 'small' plantations were being developed as we will see). There has been minimal development in the productive forces. No new ways have been found to combine labour with the productive forces to overcome the limits imposed on planters by the restriction to the production of absolute surplus value in plantation coffee production. Smallholders continue to provide necessary inputs into production from within the household and though not directly exploited by the dominant class continue to be the victims of the simple reproduction 'squeeze'. Plantation labour as a class continues to be disorganised through the process of coffee production on plantations and thus continues to have little effect as a class on society and politics in the Highlands in the post-colonial period. There is no need then in this section to give a detailed account of the structure-in-production on either smallholdings or plantations as was done in the study of class location in the colonial section. However, the patterns of ownership and control of the means of production have altered in a significant way. Not only did white planters leave their plantations to national owners, groups,
Development Corporations and classes but the class fractions which emerged from amongst these new owners formed and consolidated in a remarkably short time. This was partly a result of the changing nature of the local economy in Eastern Highlands, particularly in the Goroka area, which from the late 1960s began to develop a service industry component to its mono-crop economy. Then with the boom in coffee prices in 1976/77 rapid accumulation took place in the area. Those nationals who opted for diversification out of coffee in response to these new opportunities opening up after 1970 are the local petty bourgeoisie. The coffee boom also opened up immense opportunities for those who chose the only other path to accumulation in an industry where profits are limited by the production of absolute surplus value. Some new plantation owners in the coffee industry followed the pattern set by white planters and integrated the ownership of their plantations with processing factories and exporters. These new owners, engaged in vertical integration in the coffee industry, are the big peasants. It is the class location of these dominant class fractions which will be analysed in this section.

Dominant Class Fractions - the Big Peasantry and the Petty Bourgeoisie

The Lowa Census Division (CD), which is also the Goroka Open electorate, is the centre of the coffee industry in PNG. Goroka had at an early stage a developing service industry exceeding in scope and sophistication that usually expected in PNG rural towns. In Lowa today, the local economy is still built upon a base of coffee production and service functions. From the viewpoint of local Gorokans, the dual nature of the local economy offered a range of opportunities for entry into the cash economy. These opportunities were extended with completion, in the 1960s, of the all-weather Highlands Highway, for it now became cheaper to employ road transport to take coffee to the port of Lae. Many Gorokans got their start driving trucks or PMV's up and down the 'coffee highway'. Others, like Hari Gotaha, went into more sophisticated service ventures. Hari, who Finney interviewed in the late 1960s had built a well equipped store and restaurant in
Goroka worth $30,000. Hari and his fellow clansman, Soso Subi, who produced coffee, had marshalled clan resources to finance their business ventures (Finney 1973:106).

The process of marshalling resources of clansmen to finance business ventures has gone through various stages since the informal process described by Finney. Good and Donaldson have shown how the process was first formalised, with the establishment by the colonial state of cooperatives and savings and loans societies, and then intensely commercialised with the spontaneous emergence of indigenous Development Corporations. The Development Corporations are

the most advanced mechanism to date - far more so than the earlier 'cooperatives' - for mobilising key resources, labour, land and capital, behind the banner of rural capitalism. (Good and Donaldson 1980:24)

The Development Corporations were formed at the right time to take full advantage of two possibly unique occurrences: the Plantation Redistribution Scheme; and the 1976/77 coffee boom. As we have seen the Plantation Redistribution Scheme did indirectly influence the change of ownership which resulted in the almost complete national ownership of plantations in Eastern Highlands. In 1976-77 the Highlands economy entered a period of frenetic expansion as world coffee prices rose six times higher than the level they were two years earlier (Wesley 1980) and see Figure 2. In this short period, the Coffee Industry Board Stabilisation Fund rose from K6.8m to K63.6m by 1978 (Bank of Papua New Guinea, Quarterly Economic Bulletin, March 1981:43). K28m was returned as disposable income to smallholders, local governments collected a record amount of head tax, new vehicle registrations in the Highlands far exceeded those in the rest of the country, K3.5m was deposited in personal savings accounts and as much money was spent on beer (K8m) as was invested in formal savings such as vehicles and plantations⁶ (Townsend 1977). Also, credit from the Papua New Guinea Development Bank (PNGDB) became available to nationals in the 1970's. Credit first became available to nationals engaged in commercial activities but by the end of the decade, as the 20 hectare study shows, credit also became available to nationals in agriculture (Papua New Guinea Development Bank Reports).
The two main indigenous development corporations in the Goroka area are the Gouna Development Corporation and the Eastern Highlands Development Corporation (formerly Bena Development Corporation). Akepa Miakwe founded Bena Development Corporation in 1973 because he realised that with Independence in 1975 Papua New Guineans would soon get control over their own resources, (Post Courier, March 29, 1977:17) and Hari Gotaha and Auwo Ketauwo formed Gouna in 1977 for the same reason (Good and Donaldson n.d.:34, Post Courier, November 7, 1980).

The major Development Corporations did very nicely out of the rising coffee prices after 1973 and especially out of the boom. Eastern Highlands Development Corporation, drawing on the resources of some 15,500 members, purchased four large plantations in 1975 and four more in 1977. Gouna (approx 2,000 members) bought two well-established plantations, Erinvale and Roka (Table 11). Gouna purchased its two major plantations at the height of the boom and expanded its service activities to include a controlling interest in Goroka Sports and Book store, a Goroka soft drink company, Goroka Tyre and Battery and a major shareholding in Pacific Helicopters. Pacific Helicopters (Hari Gotaha and Auwo Ketauwo are directors) is a particularly bold venture which began in 1975 with one helicopter and had ten helicopters in 1980 (Anderson, Post Courier, November 7, 1980). Eastern Highlands Development Corporation also benefited from the boom, spending some K200,000 on extending its processing capacity at its K.5m processing factory at Urona plantation and being in the extraordinary position by 1977 of being able to repay in full loans taken out to buy its plantations after only two years – a total of K350,000 (Post Courier, March 29, 1977).

The differences between big peasant interests represented by Eastern Highlands Development Corporation and the interests of those engaged in service or petty bourgeoisie activities like Gouna, have always been apparent though these differences have not been thought to constitute the existence of separate class fractions until now. This is because analyses by others such as Good and Donaldson (1980) have not dealt with the structure-in-production in the industry nor with the
appropriation of surplus value. To show how the existence of class power (defined doubly by role in production and by opposition at the point of production) explains the struggle for political power, it is necessary to enter the 'hidden abode of production' (Marx 1954:172).

The deeper antagonisms between the big peasant class fraction (Eastern Highlands Development Corporation) based on a network of production relations centred mainly on the coffee industry and the petty bourgeois class fractions (Gouna) based on a network of production relations centred mainly on service-type industries is most evident when it is realised that appropriation of surplus value by each takes different forms. We saw in the earlier section that surplus value is the excess value created in the course of the capitalist production process. We also saw that Marx had shown theoretically that there are two possible ways to increase the rate of surplus value in capitalist production, the production of absolute surplus value and the production of relative surplus value. The production of absolute surplus value is the most obvious and historically the earliest form for increasing the rate of surplus value for it occurs when the capitalist aims to extend the working day. But there are natural limits to the production of absolute surplus value. For example, there are limits to the lengthening of the working day due to the fact that labour power is also living labour. This fact sets natural limits on the amount of time a labourer can work (the labourer must eat and sleep to renew the labour power). These natural limits have forced capitalists to attempt to increase the rate of surplus value by the production of relative surplus value, that is by increasing the intensity (or productivity) of labour during whatever time it is at work. The two main ways in which relative surplus value can be produced is by eliminating wasteful labour time through an increasingly sophisticated and complex division of labour (Taylorism) and by putting labour to
work with new and more efficient techniques embodied in complex machinery or through the development of new skills which act to reduce labour time.

If we now apply this class analysis to the structure-in-production existing in Goroka it would appear that the big peasantry (Eastern Highlands Development Corporation) appropriate surplus value largely through the production of absolute surplus value while the petty bourgeoisie (Gouna) appropriate surplus value largely through the production of relative surplus value. The big peasantry are limited to the production of absolute surplus value because as we have seen the care and harvesting of the coffee berry is a delicate process not susceptible to the introduction of new techniques in complex machinery or developed skill. Machinery is limited in the harvesting of coffee for the simple reason that not all coffee berries on a tree ripen at the same time and a berry processed but not ripe develops a bitter taste which reduces its value. Berries have to be processed within twenty-four hours of picking or they deteriorate. Thus 'pickers of quality coffee must return to the same tree time and time again to pick only the ripe cherries - an inordinate amount of labour for the two lb. of clear green beans which is an average yearly yield for one tree' (Roden 1977:49).

No machine has yet been invented which can tell the difference in ripeness of various berries even if it could get then off the tree without damaging them. In Brazil they use machines to strip everything off the tree at once, leaves, flowers, overripe berries, underripe berries - but this can only be done with poor quality coffees at a time of booming prices, for it takes the mutilated tree two years to recover from this savage treatment (Roden 1977:49). Thus while human skill is needed to harvest the coffee berry this is not a very high level of skill. Little investment is made in its application and little investment is devoted to developing it, for it is a simple procedure which cannot be made more efficient above a certain level. There seem to be few ways in which labour can be coupled with machinery or developed in skill in harvesting (or weeding) to
improve the productivity of labour. Thus coffee producers must employ a sizeable labour force but due to the agronomic features of the plant itself are limited in their ability to appropriate relative surplus value. So it is through attempts to extend the surplus labour time via the lengthening of the working day - through the production of absolute surplus value - that coffee producers have attempted to increase the rate of surplus value and therefore profits. The length of the working day during harvesting has been extended by paying pickers piece rates. We saw in the earlier section that this is particularly successful in the Highlands where pickers are generally local village women or wives of the permanent labourers who see no need and have no desire to establish an agreement on what is a 'fair' working day.9

Planters can extend the working day by paying pickers piece rates but they are still not as well off as those capitalists who can maximise profit in production by going beyond the production of absolute surplus value. In the service activities of the petty bourgeoisie the only limits to the appropriation of surplus value is the present state of technological development and the cost of installing new machinery and developing new skills. In the Goroka Soft Drink factory for example, there is a fairly sophisticated division of labour in which workers with different levels of skill operate different stages of the production process. Clearly also the intensity of labour can be increased with faster, more efficient bottling machines etc. In the case of Pacific Helicopters, it is also true that a fairly complex division of labour exists among the various maintenance and service personnel employed by the company. The pilot is, of course, the ultimate specialist whose productivity can be increased with the provision of new, faster, more specialised helicopters.10 The petty bourgeois class fraction has even attempted to produce relative surplus value on its coffee holdings. Gouna has trained teams of pruners and fertilisers which move around from plantation to plantation and do the job with greater efficiency.
So far I have argued that there are sufficient differences in the appropriation of surplus value at the level of class location (in production) to establish the existence of two class fractions, a petty bourgeoisie which produces mainly relative surplus value, and a big peasantry which produces mainly absolute surplus value. However, the analysis has also uncovered, though not yet highlighted, certain similarities that exist between the class fractions at the level of class location (in production). The major similarity is that both class fractions, despite their different forms of production of surplus value, are in the final analysis engaged in the appropriation of surplus value. They are both determined to alter the relationship between necessary labour time and surplus labour time in favour of surplus labour time. It is this similarity which makes them antagonistic class fractions but not antagonistic classes.  

Production of a commodity for sale in a market with the object of realising profit is a process based on the appropriation of surplus value. By the 1980's the possibility of increasing profits in the realm of production and in the process of exchange had reached certain limits for both the petty bourgeoisie and the big peasantry. The limits imposed in the production process by both the production of absolute surplus value and relative surplus value had been reached. The reorganisation of plantation labour into family work teams pushed the production of absolute surplus labour to its limits. Similarly, in industries based on the production of relative surplus value, limits had been reached with the purchase of the most up-to-date machinery in most of the service activities. At the level of exchange limits had also been reached because economic activity had slowed down nationally and locally particularly as coffee prices had continued to fall despite international quotas. Goroka had fallen behind its Highlands rival, Mt Hagen, as a growth centre which brought a deterioration in Goroka's service industry to accompany its coffee worries. Gouna turned in a very modest profit before tax of K17,672 for the year 1979. Gouna’s main investment since 1978 is the construction of a K800,000 shopping and office complex in the heart of Goroka town which is a major project, but Gouna has been warned by its bank manager to slow down and consolidate over
the next three years. As far as is known, Eastern Highlands Development Corporation has made no major purchases in the last four years. When the limits are reached to appropriation of surplus value in the production process itself, capitalists must attempt to increase profits outside the realm of production in the process of exchange at a time of economic growth and/or by receiving beneficial treatment from the state.

A result of the period of rapid accumulation by the Development Corporations and the decline in the economy was that the focus of their activities shifted from the marshalling of clan resources at the village level to protect their, by now, large scale economic interests which could only be achieved at the national level through access to the agencies of the state. It now became economically imperative for the Development Corporations to gain access to financial resources, to seek protection from competitors and to forestall state encroachment on their profits through unnecessary taxation. Gouna appeared better able to adapt to these new political and economic circumstances. Gouna's 2,000-plus members or shareholders were grouped into seven business groups, however each business group was structured more like a company than a clan based business group and was tightly controlled by a Gouna director. Gouna's expatriate manager, Andes Berquist could thus be sure that a decision passed by the directors would be acceptable to the shareholders.

Gouna did benefit from the early nationalism of the petty bourgeois leaders but in recent years and especially since the formation of the PPP-National government in 1980 its national political influence has declined. Gouna's service or petty bourgeois activities have suffered from national government petrol tax and Goroka Soft Drinks have not received the assistance an infant industry like this might expect from a national government. However, the sore point with Gouna clearly concerns Pacific Helicopters, whose plight has received little sympathy from the new PPP-National Party government. Although Pacific Helicopters has expanded its fleet, Hari and Auwo believe it would be even more successful if its operations could be protected by the national government from competition with
overseas operators. Hari and Auwo believe they are offering a valuable service to PNG and believe the national government should act to ensure that 'Pacific Helicopters must stay in PNG' (Post Courier, January 29, 1981). Gouna is now suffering from the antipathy its directors have always held for national political involvement and from the commitment to the quaint liberal notion of a separation of business and politics, or as Auwo put it - 'Business is business, politics is politics' (Auwo Ketauwo, Interview 23 June 1982). By 1982 with the recession deepening and a hostile government in Port Moresby for the first time, the petty bourgeoisie were forced to reconsider their beliefs about business and politics.

Eastern Highlands Development Corporation has a much looser chain of command. Its 15,500 members are grouped into fourteen business groups, but these business groups are the more orthodox type based on customary law and clan based decision making. This looseness in the organisational structure of Eastern Highlands Development Corporation affected the exercise of the management function so gravely that it soon became evident that this function could not continue to be exercised from within the organisation itself. Eastern Highlands Development Corporation contracted out the management of its coffee plantations to ANGCO Pty Ltd soon after they were purchased in the mid-1970's. At that time ANGCO was a foreign-owned company, one of the oldest and largest companies in Papua New Guinea and the principal coffee export firm in the country.14

In the beginning, Eastern Highlands Development Corporation had an orthodox contractual arrangement with ANGCO. Eastern Highlands Development directors were denied influence on ANGCO management decisions in return for the efficient operation of their plantations, but as circumstances changed and realignments in class forces took place, so the nature of the relationship altered from a contractual to a symbiotic one. The major change which occurred in 1977, the purchase of a majority shareholding of ANGCO (60%) by the government's Investment Corporation (worth K3,214,281 in 1982) had an oblique effect on the relationship between ANGCO and the Eastern Highlands Development Corporation.
While ANGCO's top management remained unchanged and the government promised that ANGCO would continue to operate on profit or market criteria, the fact that ANGCO was now owned by a government statutory authority meant that inevitably more nationals would be recruited into the company and that this recruitment was likely to bring in its wake an intrusion into the company of coffee politics. This trend became more evident with the appointment of Mr Benias Sabumei, former Deputy Secretary for Foreign Affairs and Trade and son of former House of Assembly member Mr Sabumei Kofikai, to a top executive position. Ben Sabumei takes a keen interest in politics and has often mentioned his political ambitions in public (Papua New Guinea Times, March 20, 1981). He is an executive officer of the National Party. His appointment helped create the preconditions for coalescence of a big peasant class fraction which had a base in coffee through Eastern Highlands Development Corporation, achieved a national reach by aligning with ANGCO steered by Ben Sabumei, and achieved its political expression through the National Party which was Sabumei's party and the party of Goroka's sitting national members Sailas Atopare and Akepa Miakwe when they became ministers in the PPP-National Party Government.

The differences between the two class fractions has been most obvious in recent years in their relation to national level politics and these differences have grown as declining economic circumstances have made it more and more necessary for fractions to consolidate their national reach. The defeat of the Somare government through a no-confidence vote in Parliament and its replacement by a PPP-National Party coalition in March 1980 was a crucial event for it had the effect of polarising the fractions in Eastern Highlands. The view from Eastern Highlands was of a national government increasingly dominated by big peasant interests leaving the national reach of the local petty bourgeoisie severely curtailed. The big peasant fraction used this opportunity to shore up the declining fortunes of the coffee industry. World prices determine the state of the industry so big peasant successes could not be spectacular, but in this period the industry had the export tax withdrawn from coffee,15 dissuaded the Coffee Industry Board from establishing its own
export company (a direct threat to ANGCO), saw Development Bank lending for coffee development double (by value) in 1980, saw the return of a system of bounty payments to producers due to low world prices (Post Courier, February 4, 1981:13) convinced almost everyone that the industry had an overcapacity of dry processing plants so that no more should be licensed, and more sensationally, captured the national government's sectoral funds for disbursement by National Party (big peasant) ministers—inter alia, Iambakey Okuk, Sailas Atopare—rather than through provincial governments. As coffee producers, Gouna have benefited from assistance to the industry but the value of this assistance is limited for Gouna given their level of diversification. Thus by 1982 the Development Corporations were in a position where they were forced to compete for access to national resources. This was the effect of declining economic circumstances but it was exacerbated by the defeat of the Somare government. The dominant class fractions had become so polarised that they were forced to enter national political struggle for the first time. We will look at the form this struggle took in the section on the form and function of the post-colonial state.

CLASS RELATIONS (OBJECTIVE) IN THE POST-COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

In the earlier section on class relations (objective) in the colonial coffee industry of PNG we saw that the objective siting of boundaries between contending classes (or between related class fractions and social categories) was determined wholly by the functioning of the private market in coffee. We saw in that section that the market worked in the interests of the dominant white planter class because they controlled the key pinch points in the colonial coffee market. White planters were united as a class in the distribution of surplus value (market exchange) just as they were united in the processes of production of surplus value. They were united as a class in the distribution of surplus value by vertical integration in the coffee industry and by the barriers this control (and racial superiority) imposed upon potential competitors. The white planters also attempted to 'coopt' middle peasants from among advanced local coffee growers
in an endeavour to maintain class unity under white planter hegemony and to further forestall competition. In the post-colonial period however the objective siting of boundaries between contending classes (and their related class fractions and social categories) becomes immensely more complex. One reason for this complexity is the effect that state intervention has on the coffee marketing chain through its effect on class relations at the main pinch points. In the post colonial period the state in the coffee industry takes the form of a strengthened, technocratic Coffee Industry Board (CIB). The form and function of the CIB will be described in greater detail in a later section. In this section however it is sufficient to note that the state, through the CIB, continues to intervene in the coffee market as a regulatory authority but with the difference in the post-colonial period that it has the power to sanction (mainly through licensing) actors operating at the various pinch points in the coffee market. This is not, as it appears to McKillop (McKillop, Williamson and Associates Pty Ltd 1982:7), an 'all pervading' state power because it stops short of state production. As Densley notes

> while there have been several major changes in the marketing of coffee within Papua New Guinea in recent years the basic structure of marketing has not altered significantly. (Densley n.d.:19)

But, the state’s power is great at the pinch points. For example, at the exporter pinch point the CIB has control over local exporters through licensing and allocation of quota shares (a result of the joining of the ICA). Thus the CIB provides state support for large firms like ANGCO which are vertically integrated in the industry and in this way the state can have an impact throughout the coffee marketing chain.

A second reason for complexity in the objective siting of boundaries through the market in the post-colonial coffee industry is the class conflict that arises between the big peasantry and the petty bourgeoisie as a result of the split within the dominant class. It will be shown in this section that while dominant class fractions do control the crucial pinch points and use every means at their disposal to maintain this
dominance, dominance in the post-colonial coffee market is not as clear cut as it was in the colonial coffee market. This is because in the post-colonial market the dominant class is fragmented and because there exists regulation of the industry along technocratic lines which often means that regulation does not always operate in the interests of the dominant class fractions. The market problem of the dominant class fractions in the post-colonial coffee market is to work out how to ensure that the market (and the accompanying regulations) stimulates the appropriation of smallholder surplus by dominant class fractions but at the same time does not drive these dominant class fractions into competition with each other. The dominant classes must ensure that the market and its accompanying regulations provides sufficient incentive for smallholders to keep producing coffee but also allows the cost of the inevitable stockholding and non-market sales to be borne in the main by smallholders. We will see how at the various pinch points different mechanisms have been tried in an endeavour to deal with this contradiction.

Exporter Pinch Point

There are seven licensed coffee exporters in Papua New Guinea (Tables 13 & 14). These are (with their 1980/81 export quota allocations in brackets) ANGCO Pty Ltd (44.8%), Gollin-CIL (Coffee International Ltd) Pty Ltd (26.0%), PNG Coffee Exporters Pty Ltd (PNGCE – 10.6%), Harrison and Crosfield Pty Ltd (7.6%), COFEX (5.3%), Namasu (4.7%), Pacific Trading Company Pty Ltd (1.0%). Two of these firms are wholly owned subsidiaries of Harrison and Crosfield Pty Ltd, the multinational trading and plantation company. The Pacific Trading Company Pty Ltd is the wholly owned subsidiary of W.R. Carpenter & Co. Estates Ltd. A third exporter, PNGCE is effectively controlled by foreigners. PNGCE is 50% owned by the Swiss-based multinational trader Volkart Bros and 41% by New Guinea Coffee Brokers. New Guinea Coffee Brokers is in turn 57% owned by the expatriate firm Collins and Leahy Pty Ltd. A fourth exporter, CIL Pty Ltd, PNG’s second largest exporter, was until November 1982 a wholly owned subsidiary of the Australian parent Gollin & Co (Australia) Pty Ltd. In 1982 three Papua New Guinea business groups – Piplika
Foreign ownership remains at the exporter pinch point in the post-colonial coffee industry but this is not a crucial factor in the export of Papua New Guinea coffee. This is so because the nationally-owned companies ANGCO and CIL dominate the export of coffee (72.8%) of exports in 1981/82) and because the changing export patterns of PNG coffee has reduced Australian commercial influence over the marketing of coffee. Table 6 shows that the bulk of PNG coffee goes not to Australia now but to West Germany and this probably means that advantages which once accrued to Australian owners of export companies are not now so great. A multinational exporter probably does save on information costs due to a world wide information network and therefore might experience some advantage on profitability but this seems hardly to show up in comparison with nationally owned exporters. In any case foreign ownership of exporting firms cannot give a firm an advantage in ICO member markets because quota shares are set by the CIB anyway. Further, Figure 5 shows, those firms which are foreign owned or foreign controlled do not have a high level of backward integration into processing and production. Pacific Trading Co. exports coffee from Carpenters’ two plantations. COFEX has no backward integration and indeed is the subject of forward integration by ASARO Coffee Estates and Kainantu Coffee Factory which own 60% shareholding in New Guinea Coffee Brokers. Harrisons and Crosfields have four coffee plantations but their main interest in production is not in coffee at all but in the colonial-sponsored New Britain Palm Oil Development. For all these reasons it is not necessary to consider foreign ownership as a major factor in the political economy of coffee exporters.

The allocation of quota entitlements by the ICO is done at present according to past market sales. In Papua New Guinea the immense power of determining quota allocations to exporting firms
is held by the CIB. The CIB must register a contract before coffee can be exported. It thus has the power to determine market shares in the highly valued member markets. This licensing system does mean, as the Hassall Report (1982) makes clear, that there is a complete barrier to entry at the exporter pinch points because it is the CIB which grants to the seven firms the privilege of permission to trade (Hassall and Associates 1982:173). However, the privilege of entry into member markets does not solve the marketing problems of exporters. Regardless of the size of their present export allocations all exporters face circumstances where there are limits to the amount of coffee which can be exported to member markets. These limits are set by the ICO. As a consequence, exporters have to export a good deal of their coffee to non-member markets which is risky and these tend to be in relatively large lots which force exporters to operate on a margin that is about 1/3 the margin for member markets (Hassall and Associates 1982:72 and 173). Since 1980, with world coffee in over-supply and all market prices low, the marketing problem of exporting firms has been serious. Not only must exporters try to maintain profits and avoid competition but they must subsidise their non-market sales in order to maintain margins at profitable levels.

In order to understand the export problem the report by Hassall and Associates Pty Ltd prepared for the Papua New Guinea Coffee Industry Board, August, 1982 examined the market problem of coffee exporters among other things and recommended a restructuring of exporters in the industry. The report contains much good information but it is necessary to treat such a document cautiously. It will be used with the following caveats in mind. In the first place the report is couched in technocratic language and presents a rather patchy analysis of the type expected from consultants. It does not make any attempt to identify the social and political relations of exporters. Instead it focuses upon a description of vertical integration and an examination of profitability levels of exporters. But in neglecting to show that behind these facts and figures there exist active social subjects - mainly the dominant class
fractions - engaged in a struggle to further their own interests the report makes some serious mistakes and ends up reinforcing the largely ideological and self-interested claims of the dominant class fractions. A study of vertical integration in an industry should show firstly how the dominant class fractions are linked through various firms and levels in the industry and then show how this vertical integration assists the dominant class fractions to maintain their dominance over the industry. The first task is difficult enough in the post-colonial coffee industry because there is a great deal of cross-class fractional ownership in the various export companies. In most companies there is not a neat correspondence between the class fractions which exist in the coffee industry and the majority owners of a company.

This non-correspondence is a result of the fact that the structure in production which generates classes is not as clear cut in some provinces and areas as was described in the previous section for the Goroka area. In Chimbu, for example, where a plantation structure has never existed the formation of class fractions must straddle production and distribution of surplus value. Thus the dominant classes in Chimbu are not neatly divided into a big peasantry and a petty bourgeoisie as in Goroka and various segments of the Chimbu dominant class fractions might look to coffee buying or coffee processing rather than ownership and control of coffee production as their means of objectively siting their class boundaries (Standish 1981). This difference can translate into their relations with exporters which may result in splits within the dominant classes of Chimbu as they support different exporters. In Kainantu an equally unusual situation exists where the representatives of the local dominant class fractions are petty bourgeois (such as Barry Holloway) but such men do not have a local petty bourgeois class base because of the limited development of the service industry in Kainantu. The representatives of dominant class fractions in Kainantu are also fragmented into supporting a range of export firms.
Similarly in the Western Highlands the neat dominant class fractional split outlined for Goroka seems not to have been expressed in any phenomenal form such as Development Corporations. Thus when Western Highlands dominant local classes come to be integrated with exporters they, like Chimbu’s, fragment into various class segments. In attempting to trace these patterns of dominant class fractional integration with exporters we have no need to deal with Harrison and Crosfield Pty Ltd or Pacific Trading Co Pty Ltd because they are wholly owned by foreigners nor do we have to discuss Namasu because this is an export company almost wholly engaged in the export of Robusta coffee.

Vertical integration is very pronounced in the case of the larger exporters such as ANGCO. This is despite public opposition to vertical integration from the CIB (Papua New Guinea Coffee Industry Board Reports, September 30, 1980:42). Privately many in the industry express the fear that ANGCO is attempting to take over the industry. ANGCO is certainly protected in its vertical integration by the fact that it is more profitable than other firms mentioned in the report. Hassall reports that ANGCO’s operating profit earned to 31 December per ton of green bean traded was of the order of K250 per ton (Hassall and Associates 1982:68). ANGCO is protected also in the industry because it is 60% owned by the Papua New Guinea Investment Corporation, a government corporation. It would be misleading to see this ownership as evidence of public sector control as the Hassall Report does. The Investment Corporation is a public holding company. It operates in exactly the same way as a private corporation would. Further, its purpose is to make its investments commercially viable so that its holdings can be sold off at the earliest possible time to national entrepreneurs. Investment Corporation ownership of ANGCO has probably had one important outcome however and that is that it has forestalled any moves to break ANGCO up. The view of the Investment Corporation is that ANGCO’s operations have significant flow on benefits to the whole PNG coffee industry (Hassall and Associates 1982:68).
ANGCO is also protected in its vertical integration by the fact that it is the exporting base of the big peasant class fraction and is thus supported by a politically powerful dominant class fraction. This is most clearly seen in the registered factories (and accompanying plantations) which have shares in ANGCO. Figure 5 shows that the major shareholders of ANGCO engaged in coffee production are big peasant development corporations of the Eastern Highlands such as Eastern Highlands Development Corporation (1.7%), Asaro Watabung Rural Development Corporation (.2%, the production base of the former big peasant member for Goroka Open Sailas Atopare of the National Party) Chimbu Holdings (2.5%) and KKB (3.5%). ANGCO is also owned by a string of financiers who play no part in production decisions and by certain groups (Bougainville Development Corporation 7.5% and Sepik Cocoa Growers Coop) who support Angco’s cocoa activities but have no interest in the coffee side of its operations. ANGCO owns a range of big peasant factories and plantations extending throughout the Highlands (Figure 5). In Eastern Highlands Province ANGCO owns 98% of Goroka Coffee Producers Pty Ltd, in Chimbu it owns 63.4% of Chimbu Developments Pty Ltd and in Western Highlands it owns 100% of Wahgi Valley Coffee Company Pty Ltd. A further possible area of vertical integration in the coffee industry for ANGCO - exporter financed processing factories - is not formally undertaken by ANGCO (Hassall and Associates 1982:89). The reason exporters finance processing factories is so that they have a tied supply at a guaranteed price (Hassall and Associates 1982:88). The fact that ANGCO does not formally finance factories probably means little given the extent of its forward and backward integration. This integration through ownership achieves the same purpose that financing factories would have anyway and that is that it assures ANGCO of a supply. I will return to this aspect of vertical integration in due course.

Coffee International Ltd (CIL) - the second largest exporter - is also vertically integrated in the industry. In 1982 three national groups purchased 75% of CIL from Collins. CIL then seemed to function as a base for disparate big peasant groups who were outside the Eastern Highlands big peasantry which dominated
the industry nationally through ANGCO. This is suggested by the composition of the groups that purchased CIL. These groups are Bomai Development Corporation led by Chimbu provincial member John Nilkare and his brother-in-law, Dominic Brae, ex-chairman of Chimbu Coffee. Bomai's interest straddle both coffee (mainly in the area of coffee buying) and service activities in Kundiawa. Piplika Development Corporation is the production base of Michael Mel from the Western Highlands whose interests in coffee include factories and plantations. The third partner is Lapusa Investments Pty Ltd but little is known of this group. This purchase in 1982 meant that the factories of the various groups having a share in CIL and CIL's ownership of the biggest coffee plantation in the Southern hemisphere the 6000-hectare Gumanch plantation near Mount Hagen in the Western Highlands further integrated CIL up and down the marketing chain. CIL, as reported by Hassall did engage in tied financing of factories before the change of ownership and it can be assumed that this activity continued after its sale. The factories were Busu Coffee, Timbug and Wahgi Mek (Hassall and Associates 1982:70). Finally, PNGCE is also well integrated in the coffee industry. Collins and Leahy Pty Ltd registered factories and plantations virtually control PNGCE and one can presume there are also tied factories operated by PNGCE. PNGCE may function as a petty bourgeois exporter outlet although more details would have to be provided before much could be said about the class base of its patterns of integration. Little is known about COFEX except that it has only recently struggled out of receivership and may not have developed a class base as yet. It appears to be owned by small groups of nationals known as Mainland Holdings.

The main reason to study the patterns of integration in an industry is to show how integration helps classes and class fractions maintain their dominance in the industry. In this context three main questions arise: i) does integration help maintain dominant class control by enabling plantations to be paid more for their product than smallholders are paid by exporters; ii) does integration help maintain class fractional control by increasing the price paid to tied factories compared to untied factories; iii) does integration help to overcome,
Integration or at least control of a substantial proportion of the coffee exported, does appear to ensure that plantations are paid more for their products than smallholders are paid by exporters. This is largely a result of the differential grading system adopted since colonial times but it can also be shown that the 'bigger' the exporter the greater the role of that exporter in under-selling smallholder coffee. Compare Table 15 and Table 16. Remember that Y grade is mainly smallholder coffee and A grade is plantation coffee. We notice two things when we look at the price exporters pay to factories. In Table 15, as the Hassall report notes, smaller exporters such as COFEX and Namusu pay higher average prices to factories for Y grade than the larger exporters pay to factories (except for PNGCE) (Hassall and Associates 1982:76). The reverse occurs in Table 16. Smaller exporters such as COFEX and Harrison and Crosfield pay lower average prices for A grade to factories than the larger exporters pay to factories. Similarly if we look at exporters margins in Table 15 (Y grade) and compare it with Table 16 (A grade) we find that large exporters have higher margins compared with small exporters in Y grade. But in A grade (although the figures are less conclusive) larger exporters have smaller margins.

What can this mean? The Hassall Report notices it but comments that the trend of smaller exporters paying higher prices to factories for Y grade is not a general one because larger exporters pay higher average prices to growers for A grade than do smaller exporters (Hassall and Associates 1982:76). This merely confuses the issue and in any case it is not useful to bring in the undifferentiated term 'grower' when the whole point in question is whether the size of the exporter allows them to pay growers differentially. In any case the Hassall Report concludes that while overall it appears that 'larger exporters generally trade on higher margins than the smaller exporters' this is not due to any single factor but rather a combination of prices received, prices paid and overhead costs (Hassall and...
Associates 1982:86). But may not the higher margins overall of the large exporters be due precisely to the observed phenomenon in Tables 15 and 16. In other words do large exporters higher margins come from the fact that they have higher margins in Y smallholder coffee? Do they have higher margins because they are buying the bulk of their coffee - Y grade coffee from smallholders - at below its market value? Do the large exporters appropriate surplus from the smallholders and pass this on as a subsidy to 'tied' plantations producing A grade coffee?

The smaller exporter is in no position to do this because of less integration with A grade producing plantations and in any case the smaller exporter is in a more competitive internal market situation. How can it be shown that this differential payment, which disadvantages smallholders, is the result of a big exporter appropriation and not merely due to more or less efficient operating procedures as the Hassall Report claims? The answer could be found by comparing the ratio of factory door price Green Bean to Export price (FOB) for Y grade and A grade coffee. Whatever the efficiency of the exporter or whatever the overhead costs this ratio should not vary substantially from Y grade to A grade. The results are set out in Table 20. They show quite clearly that while the return to growers of A grade coffee (green bean) hovers around the 70%\(^{25}\) the return to growers of Y grade coffee is around the 63% of FOB mark. This would suggest that Y grade coffee growers are being unfairly discriminated against as regards the proportion of the FOB which returns to them. Remember that most Y grade is sold as parchment coffee but that when recovery rates are taken into account an accurate price is obtained. A further interesting feature of Table 20 is that it is the larger exporters who have the greatest gap between the ratio paid to A grade coffee growers and that paid to Y grade growers. This further reinforces the idea that large exporters appropriate surplus from smallholders and return it to integrated plantations.
Processor Pinch Point

If the big exporters are subsidising A grade or plantation coffee by paying lower prices on Y grade they are subsidising only A grade coffee which is processed in factories tied to them. The tying of factories to exporters is achieved mainly by financing the factory in return for all or part of the crop at a guaranteed price. It is this aspect of integration which the Hassall Report considers has the greatest influence on market behaviour for factories which are tied through finance or directly owned by a large exporter receive more favourable treatment than untied factories (Hassall and Associates 1982:173-174). Table 18 contains the data used by Hassall and while this is limited it is enough for them to conclude that for both ANGCO and CIL, indicators are that directly owned subsidiary factories may receive more favourable prices than tied and untied. (Hassall and Associates 1982:91)

Hassall are of the view that the tied relationship only works one way. They argue that

factories wholly owned by exporters tend to sell to that exporter. Likewise, exporters financing factory operations generally do so on the understanding that they received amounts of coffee commensurate with the amount of finance involved. (Hassall and Associates 1982:174)

But Hassall claims that this does not mean factories with shareholders in exporting companies sell exclusively to that exporter. This may be the case. Such suppliers are free to shop around to get the best price from an exporter. But do they? Indications are that suppliers to ANGCO who have shares in ANGCO such as Eastern Highlands Development Corporation (EHDC) definitely do supply exclusively to ANGCO. This point was made obliquely by Tom Fox, Chairman of directors of ANGCO. Fox said

some of our shareholders, such as the Eastern Highlands Development Corporation, Sepik Coffee Producers and Bougainville Development Corporation have a very direct relationship with the Company as suppliers. (The Papua New Guinea Times, 'Coffee Supplement', March 9, 1983:13)
If this is the case then it further underlines the utility of vertical integration in siting class fractional boundaries against contending class fractions. The integration of exporters and processors ensures that these class fractional boundaries are maintained in all the areas where the fraction is active and it ensures that losses by the class fraction in one area of its market operations can be subsidised by profits from other areas of class fractional activity.

The Hassall Report expresses concern (correctly) at the extent to which the dominant class fractions are moving to close off the industry at the various pinch points through integration and reduction in competition. The report states

by owning and financing factories, exporters (mainly the two biggest exporters) have established claims on about 53% of the coffee crop. Thus, less than half of the coffee crop is available for purchase on a fully competitive basis. This degree of integration and control is probably not consistent with the concept of workable competition. (Hassall and Associates 1982:174)

However, it is not merely integration of factories with exporters which provides barriers to new entry to coffee processing but it is the CIB itself through its registration procedures and current policy against new negotiations which restricts entry to the processing pinch point. In April 1978 the CIB issued 'savage' guidelines for the registration of coffee processing facilities which included registration of facilities or plantations owned by nationals and established before 1978 and proclaimed that no new factories would be erected even on plantations. The CIB also issued strict building and equipment requirements as well as tough requirements for management and finance of existing processing plants (Papua New Guinea Coffee Industry Board Report 1979:4). In that same year court action was taken against

an organisation from Eastern Highlands Province for illegal processing of coffee in unregistered processing facilities and another person for hindering and obstructing board inspectors in the exercise of their duties. (Papua New Guinea Coffee Industry Board Report 1979:18)
Seventeen processors were convicted and given fines ranging from K27 to K120 because they failed to lodge their monthly coffee processing returns as required under the Act (Papua New Guinea Coffee Industry Board Report 1979:18).

Given the existence of vertical integration in the industry it could be asked whether the CIB is using the coercive power of the state to reinforce the power of dominant class fractions at the processing level? The CIB would claim to be acting in exactly the reverse fashion and would argue that it is its registration of factories which has preserved the conditions for 'workable competition' in the factory sector as Hassall puts it (Hassall and Associates 1982:174). The structure of factory ownership and production 1980/81 (Table 19) does suggest there is a good deal of diversity in the processing industry. As table 19 shows there are five different classes of owners - National groups, government and semi government bodies, other citizens (including individuals and partnerships) coffee exporting companies and exporters (both companies and individuals). There are processing factories in almost all coffee producing provinces although 60% are concentrated in Eastern and Western Highlands where after all most coffee is grown. There are nine independent factories (in the sense that they are not tied to plantations) six in the Western Highlands Province and three in Eastern Highlands (Hassall and Associates 1982:44-47).

The CIB would argue that strict licensing procedures for processors are required because there is an overcapacity in processing in the industry and also as a means '... of safeguarding the quality and reputation of PNG coffee' (Post Courier, March 30, 1978). It has been common wisdom for many years to argue that processing facilities are under-utilised in the coffee industry. Officers of the CMB were fond of saying that processing facilities were three times as great as supply. They argued that this was because many plantations started small factories and were registered for purposes of processing their own coffee but then moved into buying more widely. For many years this was an unquestioned assumption in the industry and the standard justification for the strict restriction of the
establishment of new factories. The argument tended not to deal with two important factors which relate to the question of processing capacity. The first is that any assessment of processing capacity in the industry must be related to the variation that occurs in the demand for processing throughout the year as a result of the coffee cycle. Overcapacity could be said to exist only if coffee factories were under-utilised during harvest time. Because of the coffee production cycle most factories are quite naturally under-utilised for the 7-8 months of the off season (Hassall and Associates 1982:49). Also, overcapacity could not be said to exist if there was under-utilisation in a flush year which might in fact mean full utilisation in every other year. The second factor that the overcapacity argument barely recognised is that coffee processing is not an undifferentiated activity. There are, in the PNG coffee industry, processing factories with the capacity to process cherry, 'wet' factories and those with only drying capacity to process parchment, 'dry' factories. Was overcapacity a factor in both wet and dry processing? There was no clear statement of this aspect of processing in the debates that took place in the colonial period.

It would seem plausible to argue that this assumption of 'overcapacity' in the industry was never fully discussed because it suited the dominant class in the colonial industry, the white planters, to restrict the expansion of processing factories. After all, white planters all had 'wet' processing factories on their plantations and restriction of extra factories meant that smallholder coffee was channelled through their plants at a substantial profit as I have shown. In the post-colonial period however the existence of dominant class fractions in the industry with different interests at various levels in the marketing chain means that any restriction of processing factories must be justified by more refined arguments. With the split in the dominant class into competitive class fractions the question of licensing of processing factories becomes a feature of their class fractional struggle. It is now argued by Hassall that overall wet factories were more fully utilised than dry factories at 82% compared to 60% (Hassall and Associates 1982:50). These
figures would seem to cast doubt on the need to restrict 'wet' factories all on the basis of 'overcapacity' and even dry capacity may be more fully utilised than Hassall's survey allows for as the World Bank noted in its 1981 Report on PNG Agriculture '...it is not clear whether overcapacity exists in the dry processing industry' (The World Bank 1981: Annex E:2). But the Hassall report does not take up any of these points in any way. It certainly does not offer detailed information as to where overcapacity exists, therefore it does not disaggregate its argument in 'wet' and 'dry' factory capacity and like the old colonial argument it merely asserts that overcapacity of processing exists in the industry. The Hassall Report states that

In the Western Highlands, factories are only using an average of about two thirds of their capacity, and this despite the fact that two registered factories have closed down recently. This compares with average utilisation of over 80% in the Eastern Highlands. (Hassall and Associates 1982:49-50)

The Hassall Report thus remains mindful of the politics of the industry where competitive class fractions could be disadvantaged by a recommendation to expand 'wet' processing and not restrict 'dry' processing. The big peasantry with their base in plantation agriculture would be severely disadvantaged by such a recommendation. In the end, Hassall and Associates are close to their technocratic leaning recommending only that 'improved processing technology in drying' be adopted so that no restriction of existing dry processing facilities would be caused by inefficient equipment (Hassall and Associates 1982:177).

It is also argued in the industry that strict restriction of processing factories is necessary if the quality of PNG coffee is to be maintained (Post Courier, March 30, 1978). According to Hurrell '... the quality problem happened mainly with Y grade coffee which represented most of the smallholder production and made up 55% of PNG exports' (Post Courier, June 29, 1977). The general problem of quality is different depending on who is thought to be at fault. One 'quality' problem occurs at the dry processing stage in which parchment of different moisture content
might be all dried together for the same amount of time. This can result in dry parchment being overdried and the wettest parchment being underdried. The processor would be considered responsible for this problem because insufficient care has been taken to separate out beans with different moisture content and give them different drying time. Another 'quality' problem occurs at the point of purchase of parchment either by a coffee buyer or at the factory door. Here the problem is that inadequate hand-sorting may have been done at the cherry to parchment stage by the smallholder. The buyer buys a bag of parchment which is of poor quality because it contains a good deal of rubbish. At this point the blame could be put either on the buyer - either coffee buyer or the factory - for accepting this inferior parchment or upon the grower for not hand sorting it. This is the argument of exporters and the CIB (sometimes) who tend to see the problem of 'quality' as mainly a problem that processors are equipped to deal with (Post Courier, 29 June, 1977). They argue that if only processors would refuse to buy inferior parchment then the quality of PNG coffee on the world market could be retained.

The CIB has the power to appoint inspectors

and such inspectors have wide powers to enter premises, vehicles etc., seize coffee, take samples, examine documents and books evidencing the purchase, sale, delivery ownership and place of production or destination of any coffee. (Papua New Guinea Coffee Industry Board 1979:2)

and these inspectors have been placed at factory doors to check the quality of coffee coming into the factory either by coffee buyers or smallholders. The processors' reply to this charge by blaming the smallholders themselves and the coffee buyers. An anonymous letter which sounds very much like the view of a prominent planter/processor clearly showed that in most cases arguments about 'quality' are arguments about the objective siting of class boundaries and especially about dominant class attempts to roll back smallholder class boundaries. Time and again this seems to be the purpose behind 'quality' arguments
which, from this perspective would not be arguments about quality at all. For example, the anonymous letter writer stated clearly a 'commonsense' view held by many in the dominant classes.

The whole issue must have its origin at the subsistence level where three quarters of this commodity comes from ... what the buyer did [at a roadside transaction which the writer observed] was check if the beans were dried and not all the contents of the entire bag. Often one quarter of the bag is filled with malformed not well fermented beans along with other foreign matter. If you tell a villager to get rid of this he tells you, 'Larim Em Bilong Hapim Hevi'. In other words he means to leave them so his bags weight is increased and he gets the maximum for it ... as long as the price stays at its highest peak this is one of the main ingredients contributing to the low quality of coffee exported. To combat this ... DPI along with CMB should ensure that competition is reduced among buyers and only factory owner vehicles buy parchment from villagers. (Post Courier, June 21, 1978)

In many ways some of the points made by the Hassall Report in relation to factories and quality support some of the points made in the above letter and in most cases they are just as ideologically loaded. The difference between the position taken by the writer of the above letter and the Hassall Report is that Hassall and Associates, like the CIB itself, have no class location. Their tendency is to be apolitical and technocratic, like the CIB is, on the 'quality' question. The CIB's usual approach is virtually to sanction all actors in the industry with responsibility for poor quality (Papua New Guinea Coffee Industry Board 1980:40). The CIB has found that it is difficult to be technocratic on the 'quality' question because it is not essentially a technical problem but a class boundary problem. To their credit, Hassall and Associates implicitly recognise this because they come out openly and argue that smallholders should bear the brunt of quality control. Their argument is a curious one. They write

In the mid-seventies when world coffee consumption exceeded supply, roasters had to lower their standards in order to maintain their market share. This had consequent effects on grower price received. In those countries where production had not fallen, high world prices meant high profits. To maintain market share and hence profits, factories fiercely competed for the
available coffee lowering their quality requirements as to the moisture content of parchment coffee. To compensate for the longer drying time needed to prepare it for the market and to maintain throughput additional drying capacity was installed. As a consequence costs rose and were covered by differentials paid for the wetter grades of coffee. The return to the grower were proportionately diminished. Additional expenditure was incurred in the purchase of fuel oil as with the wetter beans husk supply was insufficient. Growers resorted to subterfuges, supported with in some cases, violent tactics to get maximum prices. Section 2.7 has provided details of grower practices to disguise quality. (Hassall and Associates 1982:61, emphasis added)

Hassall and Associates are embarking here upon an entirely new principle of capitalism in this simple quote. We are asked to believe, contrary to hundreds of years of economic and historical evidence, that the adoption of new technology ('additional drying capacity was installed') increases ('as a consequence costs rose') the costs of production rather than decreases them. We must remember that this argument is being applied to a section of the industry where there is supposed to be a workable competition between capitals. Further we are asked to accept that smallholders (for these are the growers who cannot engage in transfer pricing between plantations and tied factories and who are said to be responsible for the violent subterfuge) should accept that at a time of record high prices their returns should be diminished. The tone of this quote is that it was really mean spirited of smallholders to resort to violence to get maximum prices when after all everybody in the industry is simply doing their best to maintain the quality of PNG coffee. It is finally time to recognise that arguments which appear to be about the quality of PNG coffee are rarely about quality at all but are in fact the cutting edge of class struggle in coffee market relations. The purpose of these arguments is not to improve the quality of coffee but to justify further appropriation of surplus from smallholders.

Finally we turn to the question of whether strict licensing of processing factories has contributed to a 'workable competition' at the processor pinch point. Competition is, as we have seen, severely reduced by the fact that many factories (53%) are tied in some way to exporters. Competition is further reduced by the
fact that most coffee buyers are tied to processors. Competition seems to be on the decline if one regards the number of processing factories as a shorthand measure of competition. In 1976 according to Anderson there were '81 processing facilities which process coffee from parchment to green bean' (Anderson 1976:6). In 1980/81 there were 70 wet and dry registered and unregistered factories - see Table 19. However, there is still competition at the processing level when judged by the large number of plants still existing, the fact that independent factories still exist and the fact that 'margins and returns in Eastern and Western Highlands appear compatible with expectations of returns generally in the PNG economy, if a little high (Hassall and Associates 1982:57). There is thus a real problem in working out the degree of competition that exists and what policy position the CIB should adopt toward the processing industry. Hassall reports,

There are therefore probably too many factories to permit the full realisation of potential economies of scale. On the other hand, it is the excess capacity which exists in the factory section which provides incentives to factories to compete with each other. (Hassall and Associates 1982:171)

It is probably the existence of this dilemma which encourages Hassall and Associates to use the adjective 'workable' when describing the level of competition. Hassall's recommendation to the CIB is basically that the CIB should attempt to retain the level of competition in processing as it is. They write 'steps should be taken to guard against further concentration within the processing sector through the takeover of existing operations either by other factory owners or by exporters' (Hassall and Associates 1982:178).

However, there is an inevitable push from within the industry to realise economies of scale and a necessity for large operators to attempt to defend and extend their control of processing by driving competitors out. The same process that led big exporters to swallow up progress societies run by smallholders in the 1960's leads big exporters to swallow up small factories. While the CIB refuses to take an active role in production and
marketing there is nothing it can do about it. Disruption to the present system comes not only from increased market concentration by also from other parts of the state such as provincial governments eager to get into the coffee action in their own provinces. Chimbu province has attempted to erect coffee borders around its province to stop buyers from other provinces buying Chimbu coffee and processing it in their own provinces (Standish 1981). 26 Sailas Atopare, member for Goroka Open (1977-82) put a motion before parliament to restrict coffee buyers entering other provinces to buy coffee (Post Courier, June 4, 1974). Even though coffee borders are not supported by the CIB and are an infringement on its authority there may be little it can do short of a long legal challenge to provincial governments if the provincial government stands firm. In all this, there seems to be little the CIB can do to prevent further concentration and centralisation at the level of processing. Clearly the degree of diversity in the industry has slowed down this concentration but it seems likely that in the next few years the industry will come to be completely dominated by a few large, vertically integrated firms.

The CIB is attempting to forestall concentration of power in a small number of firms. This is being done in the best (technocratic) interests of the industry though such an action is only incidentally in the best class interests of smallholders. As the struggle is played out one can expect the dominant class fractions in the industry - the big peasantry and the petty bourgeoisie - to consolidate their hold over the processing sector. The dominant class fractions through ANGCO and CIL virtually have a stranglehold on the processing section as it is. Petty bourgeois interests are important because at least 1/3 of the registered factories which are owned by organisations which own other factories, almost half of which are not directly connected with the coffee industry.

These links with other businesses could become extremely important during an extended period of depressed business conditions. Earnings from other businesses could be used to support coffee activities and enable them to survive. (Hassall and Associates 1982:48)
The CIB is not a tool of the dominant class fractions in the processing sector but nor is it holding up their march to accumulate and exploit smallholders.

Coffee Buyer Pinch Point

Coffee buying is one of the few areas in the industry where nationals could engage in substantial accumulation in colonial times. It was thus an area in which the early independence period saw legislation which reserved the coffee buying for nationals and other citizens. In effect, the CIB gave unconditional authority to various citizens to deal in coffee. CIB drew back from licensing buyers although there were attempts by provincial governments to license buyers in their province. Licensing buyers is politically risky because it would threaten to uncover the various ties and secret contracts which tie buyers to factories. Many people in the industry still like to believe that coffee roadside buying from smallholders is a fiercely competitive business. But as buyers still remain tied to factories it seems unlikely that localisation of buyers had any effect on the industry at all. In the 1970's there continued to be squabbles over whether smallholders should sell cherry or parchment, whether buyers should exercise better quality control and even a suggestion from CIB that roadside buying be banned altogether (Papua New Guinea Coffee Industry Board 1979:18). These were often self interested arguments which came to nothing and so need not detain us.

This section endorses the conclusion of Hassall and Associates that there is a considerable amount of integration in the industry (Hassall and Associates 1982:173). This is particularly the case at the exporter pinch point in the marketing chain. At the exporter pinch point the strategy of the dominant class fractions has been vertical integration of exporters with processors. Exporters have also an assurance from the CIB of a guaranteed share of the export quota. This strategy has protected the market share of each exporter and forestalled competition between them but it has not provided exporters with a
subsidy for their non market sales except insofar as they can pass down their reduced profit margins to processors and then on to smallholders.

At the processor pinch point the strategy of the dominant class fraction has been vertical integration plus a strict restriction on the establishment of new processing factories. The restriction on the establishment of new processing factories is aimed at controlling smallholder coffee so that all parchment and cherry must be processed in existing factories. This restriction has succeeded in stopping new factories from being established but it has not reduced competition between existing factory owners. It has in fact so heightened the competitive struggle between processors that moves have been afoot in Chimbu and Eastern Highlands to establish coffee borders and outlaw buyers and processors from outside these provinces from competing with buyers and processors from that province. Such moves are evidence that processors are worried about their control over this pinch point. When this is added to the growing public doubt that there is any real case for believing that the number of processing plants should not be expanded then the strong sugestion must be that dominant classes have not made a great deal of success in controlling the processor pinch point.

At the coffee buyer pinch point the strategy of the dominant classes is vertical integration plus pressure on smallholders to deliver cherry to buyers rather than parchment. It is claimed that the quality of smallholder parchment is inferior and that the whole industry would be better off if smallholders sold only cherry. Little progress has been made in this area as far as the dominant classes are concerned for the outlawing of parchment would not be politically possible in post-colonial PNG. The dominant class fractions have had great success at the exporter pinch points but only limited success at both the processor and coffee buyer pinch points in their attempt to achieve class unity and appropriate smallholder surplus at the class relations (objective) or market level.
A new phase in Papua New Guinea politics began with the election of a national government in 1972. The promise of executive authority and decision making by nationals for nationals was made to the nation as a whole and accepted by it. The promise was also made and largely accepted within the coffee industry. In the colonial industry, as we have seen, formal political activity was restricted to the role of the hapless DASF and the planter-dominated, but severely curtailed, power of the Coffee Marketing Board (CMB). The informal politics—the politics of the quiet meeting, the word in the right ear, the appointment of a colleague who is on side—in the industry was also planter dominated. The informal politics of the white planters went beyond 'quiet words', as we have seen, when it devised sophisticated strategies of cooptation, the middle peasant strategy.

However, from 1972, two main changes occurred in the state to change these colonial political patterns. The first was that the formal political institutions, the legislature and the public service, were opened up to national influence and control. The electoral struggle became the focus of political attention for legislative autonomy and ministerial responsibility and rapid localisation of the public service seemed to many nationals to crack open the cold, colonial institutions allowing nationals to enter and exercise their political and other skills in the best interest of the nation as a whole. The second change to the state occurred almost as a by-product of the intensity of the electoral struggle. This was decentralisation (Ballard (1981); Standish (1979), Conyers (1976)). In Papua New Guinea, decentralisation has required the establishment of provincial governments in all nineteen of the nations provinces. Each provincial government was intended to be a semi-autonomous second tier of government within PNG, each was to have a provincial assembly, an executive and a secretariat and a range of functions previously carried out at the centre. Each of these changes to the state had the potential to determine the form politics would take in the post-colonial coffee industry.
In the 1970's coffee politics did not dominate the electoral struggle in the Highlands. At the national level command of the executive was largely in the hands of a national petty bourgeoisie assisted by a very powerful social category, the technocracy. The defeat of the United Party in 1972 disorganised a dominant class fraction in the industry - the big peasantry and left them out of formal political representation for most of the decade. The local petty bourgeoisie and big peasantry settled in, as we saw in the class location section, for an extended period of class formation. Class politics in such circumstances became informal in a manner similar to that in which white planters had engaged.

By the 1982 election, however, circumstances had changed. The main catalyst for the emergence of an electoral struggle between local class fractions, the petty bourgeoisie and the big peasantry, was the replacement in 1980 of the national petty bourgeois government by the Okuk-Chan government, a government which increasingly came to bear the mark of a big-peasant-dominated government. I have shown in a previous study (Stewart 1984b) how these circumstances drove the two class fractions into open electoral competition at the national level for the first time. It is necessary to note briefly here the more important empirical and theoretical findings of the study for a complete understanding of coffee politics in post-colonial Eastern Highlands to be achieved.

The focus of the study (Stewart 1984b) was on the emergence of a competitive struggle between the local petty bourgeoisie and the big peasantry in Goroka Open electorate, heartland of the Papua New Guinea coffee industry. Smallholders played little or no part in the struggle for electoral representation. It was shown that the dominant class fractions were indeed the mobilising forces in the Goroka Open election in 1982. The parameters of this political struggle were established in the period before nominations closed as fractions attempted to outmanouever each other by standing candidates with competing characteristics. The class fractions selected candidates to represent the fraction in opposition to other fractions. The selection process was rather
unique. Class fractions chose candidates not on the basis of the candidates' individual characteristics or background, but by the candidates’ potential for winning and/or vote splitting which depends in turn on the candidates’ strategic location in town and country. The apparent randomness of candidate nominees and voter choice was traced back to spatial location and location in production and shown to be logical when viewed in the context of an electoral struggle between two competing class fractions, the petty bourgeoisie and the big peasantry.

The theoretical contribution of the research was to demonstrate how class fractional competition in coffee can take place at the electoral level. It was shown that, in the course of the electoral struggle, the petty bourgeoisie had no alternative in 1982 but to have the representative for Goroka Open labelled a Pangu candidate. It was emphasised, however, that this outcome was contingent upon the distinctive national and local circumstances that existed at the time. In 1982, in Goroka Open, national and local circumstances ensured there would be a correspondence between Pangu and the petty bourgeoisie and between the National party and the big peasantry. The exigency of fighting an election can force a correspondence between a party and a class fraction. But it does not follow, nor was it claimed in the study, that a contingent correspondence of the type occurring in 1982 would prove durable. Instead the analysis suggested that it is precisely because the party label is of so little importance in the struggle between class fractions that a correspondence between any single party and a class fraction is unusual and probably unimportant in periods between elections and in most national and local circumstances. In any case, it is important to remember, as later sections show, that electoral struggle is only one arena for dominant class fractional representation and competition in the state.

The major structural change to the state in the post-colonial period is decentralisation. Decentralisation represents an increase in functional autonomy in the state. This has allowed dominant class fractions to gain what Alavi (1982) has called representation in the state apparatus including provincial
governments and decentralised state branches. Increased functional autonomy in the state has also allowed dominant class fractions to press their demands inside the state through different modes of representation, either through party, or by arguments for regulation and licensing and through formal and informal politics. Needless to say, in a new state with a good deal of functional autonomy between state branches and a state where there is great physical diversity anyway, class fractions have developed an impressive range of formal and informal ways of making demands in order to gain representation in the state.

However, whether the establishment of provincial governments represents a major change in the class struggle depends to a great extent on the resources available to provincial governments. The provinces appeared to have access to generous funding and this led Good and Donaldson to believe that provincial government would become a class contestable political arena and they predicted that provincial governments must inevitably be captured by the rich rural classes (Good and Donaldson 1980:47). However, the executive powers of the provincial governments are limited. The most substantial is the administration of primary schools, although such areas as the licensing of mobile traders could give them some leverage. Taxation powers of the provincial governments are limited. Most of the important tax provisions (such as import and export duties, company tax, personal income tax) remain with the national government. The provincial governments do have the power to raise sales taxes but, as the Eastern Highlands provincial government found (Stewart 1984b:19), these are politically risky. The resource base of the provinces varies greatly. Some provincial governments like North Solomons Provincial government is rich on mineral royalties but in other provinces as Bob Adams of the Department of Decentralisation said in 1982 that:

there still hasn’t been an effective decentralisation in lots of provinces ... Provinces don’t really have much power. They are certainly involved in what is happening, they are held responsible for what happens but their capacity to control these happenings is very limited. (Bob Adams: Interview 17 May, 1982)
This is not to say decentralisation (as opposed to Provincial Governments themselves) has had no impact at all. In this section on the form and function of the post-colonial state in the coffee industry I first analyse the role of the Department of Primary Industry (DPI) and show that decentralisation of DPI has completely emasculated its influence in the industry. I then turn to a study of the CIB which, through its stabilisation fund, achieved a measure of growth in functional autonomy in the post-colonial period. I show that beneath the electoral factors such as the complexion of the national government and declining economic fortunes, which drove the dominant class fractions into electoral competition for the first time in 1982, is the restriction on development imposed quotas and the limitations of the world market in coffee. This fact has caused the dominant class fractions in the post-colonial coffee industry to turn to the state for assistance in squeezing more out of the industry. The cruel dilemma the dominant class fractions face however is that the growth of functional autonomy within the branches of the state such as the CIB has not given class fractions dominance within the CIB (and the payoff this should bring) because the CIB has been constituted on technocratic grounds. This realisation has only occurred very recently and it has given rise - since the coffee depression of 1980/81 - to feverish activity and proposals for restructuring of the industry at production and exchange levels and to the CIB itself.

The Department of Primary Industry (DPI)

The third of the Eight Aims of 1972 aimed to put an emphasis on agricultural development in general and, as we have seen, led in the coffee industry to a programme to regenerate coffee extension activity and to embark on a modest coffee expansion programme.

This programme, announced in 1973, was to focus on the less developed areas where it was envisaged that DPI would play a major role through distribution of seed and extension advice. In 1981, the World Bank review mission to Papua New Guinea warned that the agricultural sector was facing major difficulties (World Bank 1981). In the same year, the new Prime Minister, Sir Julius
Chan - a former Minister for Primary Industry - set up the National Agricultural Committee, a cabinet committee described as an emergency committee because by then

the agriculture sector was already depressed, production and productivity had declined and commodity prices were well into a downward spiral. The plantation sector had virtually ceased to invest in property improvement ...
(Sir Julius Chan, Draft Hansard, September 7, 1981)

By 1981 agriculture, particularly the export commodity products sector, had entered a stage of static growth and was suffering from government budget constraints as well as public complaints about the effectiveness of government services. The assumption that somehow government was responsible for the decline of agriculture through the lack of provision of services (DPI in particular) and that it could do something about this decline led to a major review of manpower and training requirements in the Department of Primary Industry (DPI), undertaken by the consultants McKillop, Williamson & Associates Pty Ltd (MWA). 28

Given the importance of downturns in international commodity prices and structural changes such as localisation and white planter exodus (in coffee), and the limits on the production of surplus value by dominant classes, DPI could not be assigned full responsibility. It is necessary to sort out the real extent of DPI’s influence in industries like coffee, which are dominated by private actors. Is it a fantasy of technocrats to imagine that a study of manpower and training requirements in DPI could have anything at all to do with the revival of agriculture in PNG?

After independence the 'minor role' DASF played in the coffee industry in colonial times became even more minor in the post-colonial coffee industry. By 1982 DPI had lost all semblance of a policy role in coffee and was reduced to carrying out mechanical tasks. DPI’s demise was caused by at least three factors internal to DPI. These problems included its adoption of the integrated rural development (IRD) approach, which was hopelessly ill-suited to a state in which state branches were extending their functional autonomy, and its continued, lamentable failure to settle upon a suitable extension method. Finally, the problem of decentralisation made coordination
between national DPI (responsible for policy and planning) and provincial DPI (responsible for implementation) virtually impossible.

The approach adopted by DPI (DASF's successor) in the post-colonial period was known as Integrated Rural Development (IRD).

In response to perceived failures of past strategies of rural development, particularly in alleviating poverty, planners in the seventies proposed a new strategy which goes beyond the agricultural sector to integrate other aspects of development to improve the life of rural people. Although integrated rural development (IRD) does not deny the need for economic growth and modern technology, it places greater emphasis on the mobilisation and development of human resource potential and on achieving a more equitable access to resources and a fairer distribution of income. (McKillop, Williamson and Associates 1982:11)

IRD is an approach as well as a project and it is mainly as an approach that it effected DPI’s role in the coffee industry. However, it will be easier to analyse IRD in its project form in order to explain its limitations.

IRD projects have been introduced in East Sepik and Southern Highlands Provinces and similar projects are planned for Enga, Milne Bay and Manus. Such projects are resource rich and usually internationally funded though this does not prevent them from putting a strain on local state branches such as DPI for personnel and other non-monetary resources. The Southern Highlands project is based on cattle and coffee production so is relevant to our study. Integrated Rural Development projects present themselves as being in the interests of smallholders and are usually based on some variant of smallholder block farming but they are in fact the ultimate technocratic approach to rural development. They reflect the technocracy's obsession for balanced growth. The strategy is basically a compromise which aims at slow transformation of traditional modes of production, a careful avoidance of discouraging rich farmers, and government adjustment in favour of the poor where gross inequalities do occur (Papua New Guinea National Development Strategy). As such it inhibits, or at least slows, class formation of local dominant
classes. Its purpose, like Hasluck's 'gradual development', is to hold back the development of the local dominant classes until growth allows an equitable distribution of these resources. This is a recipe for much political strife in a capitalist society as has occurred in the Southern Highlands where conflict between the technocrats engaged in the project and local dominant classes whose base is the Provincial government has been prevalent.

The basic problem with Integrated Rural Development projects is usually stated as being coordination. This is said to arise at the implementation stage in the problem of coordinating of the various state branches, consultants, households etc which provide resource inputs to the project and at the project operation stage. These projects are often huge, the Southern Highlands project is virtually the development programme for the entire province. It therefore seems plausible to argue that coordination is the problem and that skilled management will provide the solution (McKillop, Williamson and Associates 1982:11).

To make the problem more difficult the relevant agencies they assert

are technically oriented, and seldom do low level staff members have financial skills or experience to effectively administer and implement management and marketing programs. (McKillop, Williamson and Associates 1982:86)

MWA's conception of the management task is that of particular skills to be learnt - i.e., financial skills - even though they acknowledge at one point that

some employers in the plantation sector maintain(ing) the view that management skills can only be learnt on the job. (McKillop, Williamson and Associates 1982:179)

They also warn in relation to the non-formal agricultural sector that

the issue of managerial expertise is a complex one due to the influence on cultural factors. (McKillop, Williamson & Associates 1982:122)
But what MWA really fail to emphasise is that management is essentially the process of applying labour to the productive forces in the most efficient way possible. This process is pregnant with class political implications. It is a sense of the politics of the project and a perception of the class make up of all those providing inputs and the trade offs which can be made between them, that managers need and this is why on the job training and an awareness of 'cultural' complexities is needed.

The coordination of resource inputs is an intensely political task. The sense of politics required might involve ability to set up meetings between the right state branches, the ability to motivate normally competitive state branches to cooperate in the project etc. No amount of expertise in financial skills or training can provide this sense of the politics of the project. Indeed it may be that the political environment and relations between government agencies and the long history of inter-agency rivalry make a project a failure purely for political reasons. This is more than likely to be the case for IRD projects in Papua New Guinea, where as we have seen there was a growing functional autonomy in the state after Independence and where the whole basic organisation of cabinet government is to encourage departments to bid against each other. At the project operation stage 'political' management is also needed especially in a volatile political environment like Papua New Guinea. Here classes or social categories are competing against each other and trade-offs have to be organised by a 'manager' who realises it is not the best technical argument which will generate cooperation but the best class political compromise. DPI is not an appropriate agency for this type of role, not only because they are technically oriented but also because as the history of the DASF showed, they have never been a politically minded department. All this suggests that IRD was probably quite the wrong general approach for DPI to take in the first decade of Independence.

DPI continued in the post colonial period to accept private enterprise dominance of the various agricultural industries in the areas of research, marketing and even extension. MWA found
in their surveys that only about half the formal private sector (the plantation sector) made much use of the services of DPI (McKillop, Williamson and Associates 1982:121). The frequency of use was very low and poorly regarded by the private sector (Tables 22, 23 and 24).

DPI research appeared to be relevant to plantations in the copra, cocoa and rubber industries but was irrelevant to coffee plantations (McKillop, Williamson & Associates 1982:101). All respondents felt that private organisations could better handle marketing activities and felt DPI should keep out of this area, which it did in coffee. In certain industries it was felt that the private sector was more suited to the provision of extension services and same private sector people even suggested that the private sector provide all extension services for a fee and be subsidised by the government (McKillop, Williamson and Associates 1982:104).

Not too many years ago the suggestion that DPI should virtually abandon agriculture apart from technical services and research would have created a storm of protest claiming that the small holder would be unable to carry on without assistance from the 'didiman'. The myth has grown up and continues to be propagated by DPI itself that whatever happens in the agricultural sector smallholders will always have DPI to look after their interests. But the fact is that since independence very few smallholders in most agricultural industries have been helped by DPI extension activities.

DPI is not an instrument of the dominant classes, because generally DPI is too incompetent to serve this purpose. DPI incompetence has stemmed not from dominant classes capturing the extension service and then appropriating it for their own purposes, as is usually the case, but rather from the effect on DPI of structural alteration to the state in the form of decentralisation. DPI was decentralised along with a number of other departments with the establishment of Provincial Government. This decentralisation created a National DPI located in Port Moresby and responsible for research, agricultural
education and training, quarantine, economic services and regulatory functions and a Provincial DPI responsible for extension services. Decentralisation has opened up a gap between the planning of National DPI and its implementation in the provinces. This problem is not eased by the fact that National DPI has to go through Provincial Government administrators to communicate with Provincial DPI. The result has been a lengthening of lines of communication. It was originally thought that the very different agricultural situations in the various provinces provided good reason for decentralising DPI, but it was never clear how planning and policy coordination should be carried out. The World Bank has suggested a restructuring of National DPI to allow it to extend its planning functions so that a National plan can be co-ordinated with provincial plans, but this is still to be carried out (McKillop Williamson and Associates 1982:44).

Technocrats and Coffee Politics – The Coffee Industry Board (CIB)

In the earlier discussion on the form and function of the colonial state in the Papua New Guinea coffee industry it was shown that the form the Coffee Marketing Board (CMB) took was Bonapartist. The CMB was Bonapartist for many reasons but the fundamental one was that it could not function autonomously in the class interests of the dominant class in the industry, the white planters. The function of the CMB was regulatory and non-interventionist. The CMB had low political penetration. It does not market the crop itself. This suited the planters (though they did not realise it at first) because their political position in the social formation as a whole was weak and 'compulsory marketing by a Board' was likely to mean that the planters themselves would be the penetrated rather than the penetrators. The CMB also had low functional autonomy. This did not suit the planters for, as CMB chairman Hurrell expressed it, the CMB should be independent from the colonial administration (Post Courier, May 27, 1977). However, as we have seen, the Minister was of the view that the CMB was a part of the government hierarchy and under the control of the Administration. The CMB was thus a Bonapartist state or a class-compromise state
through which white planter class power was modified by the Administration, the Minister and ultimately the metropolitan bourgeoisie and the ICA.

In 1976 the Act governing the role of the CMB was altered and the CMB was renamed the Coffee Industry Board (CIB). We have seen how the CIB functioned at the various pinch points but so far its role has been presented in an uncoordinated manner. Its role has been shown largely to suit the interests of the dominant class fractions but its form and function have not been properly outlined. In this section I examine the extension of power of the CIB that resulted from the establishment of the coffee stabilisation fund which, under the Coffee Industry Board Act, was the full responsibility of the CIB. The stabilisation fund in coffee was set up to even out the price received by 'growers' as a result of fluctuations in international commodity prices. The CIB collected a levy from coffee on a sliding scale to pay into the fund and was obliged to pay out when prices fell below certain levels. In this section I show that the functional autonomy of the CIB rose as dramatically as the level of the fund did in the 1970's and the fund gave the CIB a great deal of functional autonomy from other branches of the state. The CIB could no longer be told it was just another part of the government hierarchy. It entered discussions with the Department of Finance and the Bank of Papua New Guinea with a good deal of weight behind it.

However, this rise in functional autonomy was a power in the abstract for the dominant classes, for there remained substantial barriers to the extent to which dominant classes in the industry could use the power of the CIB in their own class interests. A major barrier was of course the division of the dominant class into fractions that were often competitive both at the level of production and in political arenas. But the main reason the dominant class fractions in coffee could not benefit from the increased functional autonomy of the CIB was that the stabilisation fund was constituted by technocrats for technocratic ends. Thus even with the existence of a stabilisation fund the CIB did not extend its function beyond the
regulatory and non-interventionist function of its predecessor. The political penetration of the CIB remained low. The CIB thus remained a Bonapartist state after 1977 even though its functional autonomy was greatly increased by the existence of the stabilisation fund. It was a Bonapartist state or a class-compromise state in which the class power of a dominant class fraction was modified by the existence of another dominant class fraction, by the intervention of the technocracy and ultimately by the ICA.

The Coffee Industry Act 1976 (No. 67 of 1976) in outline did not vary a great deal from the previous act governing the operation of the Coffee Marketing Board. In introducing legislation the Minister for Primary Industry, Boyamo Sali, noted that

one change in this Bill from the existing Coffee Marketing Board Act is that it is proposed to rename the Board to be the Coffee Industry Board. It is considered that the new name describes more adequately the role of the Board, especially its role of representing coffee growers from all coffee growing areas. (National Parliament Debates, Coffee Industry Bill 1976, 22 November 1976:2042-2043)

The Act set down in Section 4 the constitution of the Board which shall consist of 10 members; Section 12 detailed the functions of the Board which were very broad and included controlling and regulating every stage in the commodity chain, price stabilisation, price equalisation and stockholding arrangements, buying and selling coffee. The Board was generally charged with the power '... to exercise its powers and perform its functions in such manner as the board considers to be in the best interests of the coffee producers of PNG' (World Bank 1981). The CMB, of course, had a similar battery of formal powers but did not use them. Likewise, the CIB did not opt to use its extensive formal powers to take over production and marketing at any level in the industry (Densley n.d.:19).

The main change to the Act was Section 25, concerning the Coffee Industry Fund. The main purpose of the fund is to stabilise the industry by giving the Board the financial stability to implement schemes for a) stabilisation and equalisation of coffee prices b)
stockholding of coffee (The Independent State of Papua New Guinea, No. 67 of 1976 Coffee Industry Act of 1976). In his second reading speech the Minister said

perhaps the most important change in this Bill compared with the provisions of the Coffee Marketing Board Act is the setting up of the Coffee Industry Fund. This will be a fund controlled and operated by the renamed Coffee Industry Board to help coffee growers in all parts of the country. (National Parliament Debates, 1976, November 22, 1976:2043)

As the Minister noted in his speech there was already a fund in existence operated by the Coffee Marketing Board.

The Coffee Marketing Board has in fact built over many years, from money received from an export levy reserve funds which at the present time is slightly less than K6 million. The Board is to be congratulated on its foresight in having this amount of money put aside to help growers if we have marketing problems in the future. (National Parliament Debates, 1976, November 22, 1976:2043)

But this was not a stabilisation fund in the normal sense for the CMB had no power to raise a levy solely for the purpose of an industry fund. The amount of money that could accumulate was limited because the Coffee Marketing Board Act allowed only for a levy within a lower limit of .5 toea per kilogram and an upper limit of five toea per kilogram' (National Parliament Debates, Coffee Marketing Board (Levy) Bill (1976), 30th August, 1976:1803). This was because it was thought that the CMB would impose a levy mainly for the purpose of covering its operating costs. It was only funds surplus to requirements that were expected to be invested and held for the purposes of assisting the industry in difficult times. Consequently the fund could never reach levels which could give the CIB real bargaining power within the state, as the fund was quickly wiped out when difficulties arose. This is what happened in 1972 when 'most levy funds and investments were required to pay a loan from the Reserve Bank of Australia which was used to purchase surplus coffee in PNG at ruling prices for resale to new markets at heavily discounted prices' (Papua New Guinea Coffee Industry board 1979:7).
The main purpose of the Coffee Industry Act 1976 was to overturn the upper limit of the levy so that it would be possible for the fund to maximise the amount of the levy it raised in a period of high international prices. Naturally, the Minister did not put the point so bluntly in his speech but he said changes to the Act were mainly due to,

> a need to have clearly defined in legislation what these funds can be used for and how they should be controlled to ensure that growers, whose money it is, are fully protected by law. These aspects are covered in this Bill. (National Parliament Debates, 1976, November 22, 1976:2043)

The new levy schedule allowed the Coffee Industry Fund to take full advantage of the high prices in the mid-1970s and rapidly build up its funds as Table 25 shows. The modest K6 million level of the Fund had reached a huge K94.6 million by 1980.

The rescheduling of the levy shows the influence of the technocrats for the timing of the Act was impeccable given the obvious fact that the 1975 'Black Frost' would lead to an international coffee boom in 1976 and 1977. The technocrats had sound macro-economic reasons for the establishment of stabilisation funds. In theory, it would provide a hedge against fluctuating international prices in the commodity itself and by stabilising aggregate demand thereby reducing economic fluctuations in the country in general. The second purpose would be achieved if the fund was free, by removing the upper limit to the levy, to raise a sizeable investable surplus which could be held in the central bank and made available to finance general state expenditure. The purpose of the Fund was not state revenue like an export tax would be because these funds were held in trust for the industry as a whole and the levy was not particularly high. Nevertheless, there existed good technocratic reasons for the abolition of the upper limit to the levy at that point in time and this was what the 1976 Act was all about. As the Minister put it

> this Bill will enable the Coffee Marketing Board to take advantage of the present high coffee prices and to fix rates of levy on all exports more in line with current export prices. (National Parliament Debates, Coffee Marketing Board (Levy) Bill, 1976, 30 August 1976:1803)
The abolition of the upper limit of the levy had advantages for the dominant class fractions in the industry though this was not fully apparent until late 1977 and 1978 when guidelines for the use of the Coffee Industry Fund were discussed. On the basis of suggestions made by Mick Wheeler (National DPI) the purpose of the fund was more clearly defined (Wheeler and Wyatt 1978). It is important to note however that while the abolition of the upper limit of the levy had advantages for the dominant class fractions the abolition of the upper limit of the levy and the 1976 Act was not sponsored by the dominant class in its own self interest. We will see in the next section in fact, that the Wheeler outline was more technocratic than class-based. Nevertheless, the abolition of the upper limit of the levy carried with it a de facto alteration to the use of the stabilisation part of the fund and this was in the interests of the dominant class fractions.

This can be shown if we compare the operation of the fledgling stabilisation fund before 1976 and the changes that occurred under the CIB Industry Act. Prior to the 1976 Act the stabilisation role of the fund (as opposed to its stockholding role) was usually thought of as stabilising incomes. This was how the fund operated in 1972 when funds had to be returned to the industry as a subsidy (or a bounty as it is called in the industry) due to the low prices. The size of the bounty to be returned was worked out on the basis of a defendable price which itself was based on costs of production plus a small margin. If this approach was done equitably (and providing of course returns actually did flow down to producers) a standard or average cost of production would have to be calculated which would take into consideration the costs of production in both the planter and smallholder units of production. We can show in a hypothetical example that such an approach must always disadvantage the production unit which has the higher money costs of production. Suppose A's cost of production is 10 and B's cost of production is 5. The standard or average costs of production would be 7.5, obviously lower than A's costs of production. Even if the margin to be added was graduated it is unlikely that A could benefit as much as B from a stabilisation of incomes. As the costs of
production in money terms in the Papua New Guinea coffee industry are higher for plantation than smallholders' costs of production (because after all smallholders do provide most of the inputs from within the household) then it seems clear that this earlier system of stabilisation did not favour the dominant class fractions.

This of course was not the reason given for the 1976 changes to the stabilisation fund. Rather, the reasons given for the change were technical. The system had to be changed according to the World Bank because '... production costs vary widely among producers and it is difficult to establish an average or representative level' (World Bank 1981 Annex E:3). The concept of stabilisation in the fund was altered almost imperceptibly by the 1976 Act to one of price (not income) stabilisation. This meant that the bounty would return to the industry from the fund not according to the costs of production of producers large and small but according to an agreed price to defend. The change broke the nexus between production costs and defendable price and therefore allowed levy appropriation and bounty payouts to range more broadly up and down the price scale. The result was that the more the price fell for coffee in PNG the greater the return to producers regardless of the varying costs of production. On the other hand, the higher prices rose the higher would be the levy extracted by the CIB to add into the fund. I will detail shortly how this levy schedule actually works but it is important to note that this redefinition of the stabilisation part of the fund from stabilisation of incomes to price stabilisation was dependent on the abolition of the ceiling on levies. In breaking the nexus between production costs and the return of the levy these changes ensured that dominant classes would no longer be disadvantaged, due to their higher costs of production, in the process of collecting a levy or being returned a bounty.

The rapid growth in the fund - in the 1976/77 coffee year it grew by about K10 million but then grew by over K50 million in the 1977/78 coffee year - made it an urgent task to settle the purpose for which fund monies would be used. The legislation was too general to be of much assistance in this area. It simply
stated that the purposes for which the fund can be used are laid down in the legislation. These specifically include the operation of price and income stabilisation schemes, price equalisation schemes and stockholding operations. There was the possibility of a misuse of funds which so worried Hurrell because various sections of the industry began to think of good purposes for which the money could be used. The Western Highlands Provincial Government made a number of requests for fund monies to assist with spraying fungus (Post Courier, March 10, 1980), there was talk of using fund money to improve the quality of PNG coffee, of assisting smallholders to bring new areas into coffee or of assistance with restructuring class and market relations at the various pinch points. The CIB was determined to retain as much money in the fund as possible though at the same time it wished to show that the fund was operating in the best interests of the industry as a whole. The CIB badly needed a justification for following this course of action especially as the minister had speculated in his first reading speech of the 1976 act that only kl2 million was required to overcome marketing difficulties. By early 1977 the fund was climbing to dizzy heights far beyond this figure making it difficult for the CIB to resist the various industry-related requests that were flooding in. The crucial intervention was made by a technocrat with DPI, Mick Wheeler. His intervention, and its close support from the CIB reflected on a smaller scale the way the technocracy had combined with the national petty bourgeoisie. In the case of the stabilisation fund operation we can see very clearly how the class effects of such an alliance in the coffee industry limits the political penetration of the dominant class fractions in the industry.

Wheeler first put a working paper to a meeting of DPI and the CIB in December 1977 when he argued that the switch away from costs of production and income stabilisation to price stabilisation was difficult to achieve while the CIB retained its dual function of stabilisation and stockholding. It was clear, he argued, that either the money in the fund could be used when needed for supporting prices and paying bounties which left the private sector in control of the actual surplus coffee or the CIB could assist growers by purchasing and stockholding their coffee when
there was a surplus. But which aim was to take priority? Wheeler argued in a later paper, January 1978, that the stockholding function should take priority because, as the operation of the ICA was weighted against small producers small producers would always get lower quotas than they should get. Also he added, quotas were the normal situation in the industry. Thus he felt that the problem of surplus production was an almost permanent one in the industry and was the most urgent and enduring problem small producing countries would face while the ICA survived. But, while he felt the stockholding function must take precedence over the price stabilisation function, he said there was no need to limit the function of the fund to stockholding,

given this priority allocation, it was relatively straight forward to design guidelines which would ensure adequate funds for stockholding and also allow some measure of price support. A certain portion of the fund must be set aside for stockholding alone while the balance can be used for price stabilisation. (Wheeler and Wyatt 1978:8)

All that was needed was to settle upon a figure of how much of the fund should be set aside for stockholding. Wheeler’s assessment of the amount required was conservative but his logic was impeccable. Wheeler wrote

The actual amount set aside had to be calculated according to estimates of the amount of coffee that it would be necessary to store according to an estimate of how long quotas would remain in force ... if quotas were to continue for any length of time PNG would certainly be storing large quantities of coffee. PNG would not be the only country forced to hold stocks, and it was estimated that after 2 years of quotas, storage capacity in the smaller producing countries will be fully utilised. Therefore if prices had not already recovered there probably would be pressure to break the agreement or remove the quotas. The present term of agreement is six years with the option to continue after the first three. It was therefore, felt that the reserve portion of the fund should be sufficient to cover 3 years of quotas. It was estimated that at a quota price (price at which quotas are brought into force) of K1300 per tonne FOB K65 million would be needed to cover all contingencies. Therefore the reserve portion of the fund should be sufficient to cover 3 years of quotas. (Wheeler and Wyatt 1978:8)
The K65 million seems to be based on the fact that 1976/77 exports of coffee totalled 49,797 tonnes (Table 5) which equals approximately K65 million when the price is K1300 per tonne.

Wheeler is perhaps a little conservative in his estimate that the fund would have to finance 3 years of quotas. This seems to be based more on the fact that there would need to be a carry over period from 2 years when it is assumed the agreement would break. This seems to contain some questionable assumptions. Wheeler’s proposal might also be considered conservative, as he seems to acknowledge, in proposing to fund stockholding of the total amount between the 62% quota level he thinks PNG usually gets and the full amount exported in 1976/77 at ICA prices. Some of this coffee would in fact be exported to non-member countries at a lower price. Wheeler acknowledges this fact but does not consider it as requiring any reduction in the figure of K65 million.

The main achievement of Wheeler’s intervention was to reduce considerably the demands being made on the fund from within the industry for it showed clearly that as much as K65 million of the fund could not be touched except in the most dire circumstances. The fund gave the CIB a good deal of power in the industry and in the state as a whole but beyond this Wheeler’s arguments gave the CIB power without being forced to represent the interests of the dominant class fractions in the industry. It was a power that Hurrell had often longed for when he argued that the CIB must become independent of government, dominant class fractions and the smallholders. It was the power to distance itself from large growers and exporters and from the state and is the reason for the self-assertive independence often heard from CIB representatives. Wheeler’s intervention was a perfect example of the politics of a Bonapartist state or the exercise of power without a class interest.

When a new levy schedule was announced in February 1978 which incorporated the Wheeler proposals on the role of the stabilisation fund, the executive officer of the Coffee Industry Board, Barry Beil, and the Minister for Primary Industry, Julius Chan both implied that the new schedule was in the growers best
interests. Beil was even quoted as saying that ‘the new levy scale for coffee exports will mean growers will pay less on all prices’, (Post Courier, February 9th, 1978) and both he and Chan gave the example that under the new levy schedule growers ‘will be charged a levy of only 1.5 toea a kg instead of 13 toea a kg on K1.75 a kg prices’ (Post Courier, February 7, 1978). This sounds like a very big difference.

Did the new levy schedule generally offer growers a better deal?

The key to the new schedule was the construction of a historical long term average FOB price for green coffee exported from Papua New Guinea. This was to be measured over the previous ten year period and expressed in terms of prices for the most recent calendar year. The historical long term average changes each year as the most recent year is included and the last year is dropped off. But in 1978 when it was introduced it was around 165 toea a kg. This figure functions as a zero on the scale of levies as prices rise above it and on the scale of bounties as prices fall below it. At this point a minimum normal levy of .5 toea per kg is collected. Levy, other than the normal levy is collected when the FOB value of the coffee exceeds the long term average price and shall be at the rate of 50% of the difference between the actual FOB value and the long term average FOB price in accordance with the level published in the National Gazette (Papua New Guinea Coffee Industry Board 1980 Appendix C). The minimum levy for the previous schedule applied only to exports below 95 toea a kg, a very low figure, so that it was certainly true that the new system corresponded favourably with the old system at the lower end of the scale (i.e., on or below the ‘new’ historical long term average). However, what Beil and Chan did not make clear is that the removal of the old numerical upper limit to the levy schedule and its replacement with an upper level ‘at the rate of 50% of the difference between the actual FOB value and the long term average FOB price’ meant that as the price got higher the new schedule made it possible for the CIB to extract a much higher levy than was possible before (in fact because there is no limit the levy can go as high as 50% the highest price).
Does the rescheduled levy system affect all growers equally as Chan and Beil and others seem to assume? This depends to some extent on how the levy is collected and whether the process is one which enables those with class power to avoid being levied or prevents them from transferring the cost of the levy to subordinate classes. The responsibility for paying the total levy is with the exporter of green coffee.

The levy must be paid before the coffee is exported. The procedure for the payment of the levy is that the exporter completes a coffee levy payment certificate showing the details of the consignments and the amount of levy due. He then pays this amount to the account of the Board at the PNG Banking Corporation, where the certificate is stamped. This stamped certificate is then presented to customs with the other documents required to be lodged for customs clearance. (Papua New Guinea Coffee Industry board 1979:7)

The exporter does not of course bear the full cost of the levy even though he is more or less responsible for collecting it because the cost of the levy can be passed down the commodity chain for contributions from various actors at various levels. It is not known quite how the cost is distributed but it can be assumed that it is simply passed down because exporters have the social power through vertical integration - as we have seen in the marketing sections - to ensure this is so. However, the collection of the levy from down the line is not a self interested class action by the exporter, the exporters do not extend their class power through this action and it does not enhance their political penetration. It is simply a recovery operation.

The payment of a bounty is done in the same way i.e., exporters are paid the bounty and they are expected to pass it down the line. But in the case of passing a bounty back, class and differentiation between actors in terms of their social power becomes an important factor. Perhaps it is even surprising that the bounty is passed back in the same way that the levy is collected when in the case of the bounty those with the social power have an incentive not to pass it down. Various reasons are given for maintaining the same payment system for bounties as for levies. The CIB view is that
After considering various payment methods to directly benefit growers, the Board paid through the exporter, this being the central point in the marketing chain. Payment is based on a scale and delivery contract between the exporter and processors. The Board considered it feasible since export levy collection and payment is also done at this point. (Papua New Guinea Coffee Industry Board 1980:44)

It is also argued that the coffee marketing chain is complex and hence other systems of payment would not be feasible. In the copra industry for example prices are set administratively and so to pass down a bounty one must identify a point in the marketing chain where the dominant actors are identifiable (World Bank 1981:33). The copra payment system would seem to make it a virtue for monopoly control to be exercised by some administratively sanctioned actor at a pinch point in the copra marketing chain. This is rightly rejected for coffee. It is also argued that if the coffee bounty was not being passed down the line then it would be evident that exporters or processors were making huge profits. But this seems to underestimate the degree of vertical integration in the industry and the potential for transfer pricing from one level to another.

In fact, what is probably being passed down the line is the same kind of hesitancy to hand over a bounty at all which the CIB itself displayed as prices began to fall. In 1980 prices began to plummet below the then bounty payment level of 202.5 toea per kg but the CIB did not wish to pay.

The bounty payable was in the Board's opinion so small that it was not worth paying. Mr Munnnull said the board thought a very small bounty would make no significant change to the final price to growers and the cost of advertising its pay out would outweigh the benefits to growers. Mr Evara gave an assurance the Board would pay a bounty as soon as the weighted average price dropped to a level where a minimum 10 toea a kg was payable on green bean. (Post Courier, September 2, 1980)

In any case it was argued, somewhat ingeniously that because growers had recently been paying a 22 toea levy and were now only paying the minimum levy of .5 toea 'In effect they are already being protected by the fund' (Post Courier, August 8, 1980). It is important to recognise that there are absolutely no mechanisms in existence to ensure that the bounty reaches the smallholder.
The argument that it does rests on a good deal of faith and a belief in competition which we have already shown is limited. It is in fact extremely doubtful that the return of the bounty does anything more than present a free gift to the exporters and tied factories.

The study of the stabilisation fund shows the effect on the class conflict and class struggle of a Bonapartist state constructed along technocratic lines. The technocracy presents its handiwork of the stabilisation fund as a technical achievement in the best interests of society as a whole. Its arguments are simple and persuasive. The technocracy claim that the stabilisation fund will stabilise aggregate demand thereby reducing economic fluctuations in the country as a whole and that the fund can also be used to protect growers when the price falls. But these two simple ideas are in acute conflict. When the price is falling is precisely the time when the stabilisation of aggregate demand is needed. The technocrats inevitably find they must sacrifice one of their promises. Their response is to resist paying out bounties in order to protect the aggregate demand function of the fund. The result is that the fund operates in such a way that it becomes more difficult to pay out bounties but easier to collect higher levies. This is not in the interests of any classes in the industry. Even the dominant classes in the industry quickly find themselves running up against the fund as a barrier. They are found to resist the 'sensible' technical arguments. In terms of class interest technocratic structures represent the worst of all possible worlds for both dominant and subordinate classes in the industry. From the viewpoint of the dominant class, the stabilisation fund does reinforce and defend their class boundaries but it does so without giving them political penetration. They can collect the levy but they cannot use it. In an industry where the production of absolute surplus value imposes limits on accumulation the freezing of class boundaries at the level of class relations is not desirable. The smallholders suffer the most from the operation of the stabilisation fund and receive the least. When the price is high they have a very high level of bounty extracted from them but when the world price is low they probably do not receive this
subsidy back as bounty or they receive such a small proportion of their contribution when prices are high that they make a significant net loss.

CLASS RELATIONS (SUBJECTIVE) IN THE POST COLONIAL COFFEE INDUSTRY OF PAPUA NEW GUINEA

The 'Silent' Class Struggle in the 20 Hectare Coffee Development Program

The dominant class fractions in the coffee industry - the petty bourgeoisie and the big peasantry - have not captured the technocratic CIB but this does not mean their social power is minor or that they do not exercise domination in the industry in other ways. In fact, one area where the social power of the dominant classes is great is in the area of coffee development. Coffee development is an area in the coffee industry where agencies of the Bonapartist state such as the Department of Lands and the Papua New Guinea Development Bank (PNGDB) are more influential than the Coffee Industry Board. Paradoxically these state branches, though Bonapartist, and therefore independent of the dominant classes, function to reinforce the social power of
the dominant classes in the industry. To show this we have to turn to the second moment of the class relation which was outlined in Chapter One. The second moment of the class relation can be called class relation (subjective) and this is the real moment of class conflict and class struggle for this is the moment of boundary struggles when classes are acting subjectively to try and expand their space and hence to shift boundaries in their favour and therefore to roll back the space of other classes and fractions.

In this section I analyse a new 20 hectare coffee development program to show the patterns of class conflict and class struggle that currently exist in the Papua New Guinea coffee industry. I argue that class struggle in the coffee industry is indirect and truncated but nevertheless real for all that. It is Indirect because the antagonistic classes are in different forms of production. Householders are not directly exploited by capital though the dominant classes would aim to extract land and labour from the household form, appropriate surplus in the form of monies or other assets of the household, monopolise the marketing outlets for the smallholder crop or in other ways turn the domestic terms of trade against the smallholder producer. Class struggle is truncated principally by the land barrier. This land barrier is a result of the post-colonial governments endorsement of the Commission of Inquiry into Land Matters (1973) view that land policy should be evolved from a customary base and not be a sweeping agrarian revolution. It has ensured that customary land cannot be bought and sold in independent Papua New Guinea.

In the first part of the paper it is shown that the design of the 20 hectare development was flawed precisely because it was conceived in a class 'vacuum'. The lease/leaseback mechanism is an ingenious mechanism for bringing land into plantation use without alienating it but its flaw lay less in the mechanism itself and more in the 'business group' structure which accompanied it for the business group structure gave little protection to smallholders in class struggle. The facilitation of credit was also flawed in the design stage for though security of tenure was established and checks could be made of the supply
of credit to the blocks by the PNGDB, PNGDB had no control over the demand side of funds requested for development of the project and thus PNGDB had virtually no control over the components that made up the budget of the block. The administrators who designed the 20 hectare development assumed that the provision of management was a technical affair but I show that even in the design stage of the projects it was possible to predict that technical control over the block by management would become social control over every aspect of development on the block.

The second part of the section examines the implementation of the 20 hectare projects. It is shown that dominant classes - whose phenomenal form is the management agencies in this case - have managed to 'disenfranchise' the subordinate classes from their land. They have also appropriated the surplus monies of smallholders for a period of at least 15 years until the loan is paid out and probably longer because the dominant classes are setting up control networks on the blocks which suggest the projects may never be independent of the management agencies. The 20 hectare coffee projects have been 'captured' by the dominant classes in the coffee industry.

The state, which promised so much to smallholders from the development and which was so intimately involved in the design of the project, has failed them in the implementation stage. How did this happen? I will show that the Papua New Guinea state is a Bonapartist state. A Bonapartist state is transcendent over the dominant class fractions. The state in the coffee industry is not an instrument in the hands of the dominant class fractions. But as the analysis of the implementation of the 20 hectare projects show the Bonapartist state can function in the interests of the dominant class fractions.

Background to the 20 Hectare Coffee Development Program

In August 1978 the Minister for Primary Industry Mr (now Sir) Julius Chan announced that the government would offer the maximum support for the establishment of 20 hectare coffee development blocks. The idea behind the 20 hectare 'intermediate'
The idea was immediately popular with small peasants. By 1982 74 projects had reached the minimal operation stage. In terms of the potential increase of production and increase in plantation acreage that the development of these 20 hectare projects represented nothing less than an immense transformation of the entire Highlands coffee industry was under way with the establishment of the 20 hectare projects. Many small peasants pooled their land, leased it to the government, formed a business group and leased the land back for 25 years to establish these 20 hectare 'intermediate' coffee plantations. Much hard and dedicated work was put into the development by officials from the various government departments and agencies and a good deal of money was invested in the development by the World Bank and later by the Asian Development Bank. Was all this effort worth it? Is the establishment of 20 hectare 'intermediate' coffee plantations in Papua New Guinea the rarest of all species of policy-making, a successful rural development programme?

The claims made in favour of the 20 hectare development projects were not simply that the development would increase coffee production but also that it would be an equitable development. Chan said in 1978 that it would '... ensure that the benefits of the industry spread among the people' (Chan 1978a). In 1985 claims of involvement in and equity for the 'people' as a result of 20 hectare development were still being made. In the recent review of the Economy of Papua New Guinea for example, it was claimed that 20 hectare coffee projects were, 'usually run by the
clan (Goodman, Lepani, Morawetz 1985:90). Equity was to be achieved by involving the clan or smallholders in the running of the block (or project) and also by the modification to the existing structure in production - plantation and smallholder production units - in the Arabica coffee industry that a 20 hectare 'intermediate' structure would bring.

Land

The initial barrier facing the development of 20 hectare projects was the land barrier based on the fact that customary land could not be alienated. To overcome this problem officers of the Department of Lands began as early as 1977 to try to put together a Land/Credit/Management package which would break the nexus between the provision of credit and the maintenance of customary land. In attempting to devise a package, land transfer was the biggest hurdle they came up against. The land mechanism had to be flexible, it had to be able to be administered under the Land Act (1962) and clearly it must fall in between the extreme positions of those on the one hand, who want to maintain customary land at all costs and those who want land to be freed for commodity production.

A new mechanism was required because existing mechanisms such as the standard 99 year lease (under the Torrens system) were unacceptable to customary landowners and because attempts to introduce a registration system for customary land not only had failed but it would not have solved the problem that disputes within a clan could not be settled in court. This would make customary title useless in any case. Most other suggested mechanisms, such as freehold tenure, nationalisation of land or tax measures to alienate waste and vacant land all have high social and political costs. In 1977 The Department of Lands began experimenting with partial leases and short-term 'Special Purpose Leases' (25 years) and longer-term (40 year) leases all of which aimed at devising 'ways of utilising this land without ownership passing from the current owners' (White 1977:1). The state - through the Lands Department - must play a part in this process because the Land Act (1962) requires all land transfers
to be authorised by the Lands Department. The state has an obligation to ensure that any transfer of customary land does not involve land that is under dispute and that all customary land owners are willing to transfer their land.

The breakthrough in devising a new mechanism came when it was realised that the state might lease land as opposed to merely authorise the transfers from the customary owners (the lead lease). This would allow the state itself to provide title to the land because the state held an estate in the land. The customary landowners would be protected because in theory they could restrict the rights of the state to those secured in the lead lease. They would not have alienated their land because they would have merely leased the land to the state for an agreed period. The state, of course, did not aim to develop the land itself, so the state would then endeavour to lease the land - with title secured - to a corporate body which could be legally responsible for development of the land. The second part of the new mechanism was the leaseback arrangement whereby the customary land owners formed themselves into corporate body, a business group, to lease the land back from the state (the sub-lease). 'Such a sublease may be to an incorporated group of essentially the same owners who lease the land to the government. This then becomes a lease/leaseback arrangement' (Lands Department 1982).

Development finance and funding was to be forthcoming in the form of credit from PNGDB. Once title was secured credit, in the order of K80,000, would be available for the development of 20 hectare coffee projects. In the Highlands of PNG where smallholders earn little more than K100 a year, this is a lot of money. It was a huge incentive for 20 hectare coffee development. Smallholders were also attracted to the lease/leaseback scheme partly because it could operate on a shorter leasehold agreement of 25 years (the lease is held by the financing authority - in this case the PNGDB - and should be handed back when the block is paid off although it is valid for the full 25 years). Other attractions of the scheme for smallholders included the provision of credit as part of the scheme and the fact that incorporation as a business group
promised to give customary landowners legal responsibilities and probably greater autonomy and control over development on the project itself.

The fact that the land for 20 hectares is put together through processes internal to the clan and not through coercive state or commercial pressure helps minimise the social costs of bringing this land into commercial production. It means that as far as possible land is pooled voluntarily into 20 hectare blocks. It is only when land is pooled voluntarily that there is any chance at all of ensuring that land contributed is not land required for 'use' value production. No one can be sure if this is the case or not but if Dick (1977) is right land pooled for 20 hectares is not surplus land. Dick (1977) has argued that there are now few areas in the highlands where people can establish new coffee gardens because 'with populations increasing many areas of the highlands are beginning to experience land pressures' (Post Courier, 19/10/76). If this is correct then customary landowners who put in land for 20 hectare development are probably making a quite rational calculation of the gains their household can make through a share in the 20 hectare projects and naturally would have high expectations that they would benefit financially from coffee production on a 20 hectare block.

Credit

It is generally recognised that the provision of credit is vital to agricultural development and is especially vital to a program like the 20 hectare coffee development scheme which involves a reorganisation of production. The World Bank provided lines of credit for development in the export tree crops of Papua New Guinea in the early 1980's but it did not have a 'plan' for development in the coffee industry much less a prescription of the social impact this credit would have in the industry. It is probably true to generalise that the World Bank sponsors reorganisation of production in order to standardise and rationalise peasant production of commodities but it is also necessary to remember that the World Bank will do this indirectly whenever possible. World Bank money is lent to governments and
not to domestic credit agencies and World Bank loans are paid from government revenues and further borrowings and not from the net returns on projects (Williams 1981). It can be argued that the shared desire of the World Bank and PNGDB to reorganise coffee production represents a 'coincidence of general purpose' (MacWilliam 1984) but there is no evidence at all that the World Bank played any role in the design or implementation of 20 hectare projects.

The PNGDB is a statutory authority set up in 1967 on the recommendation of a World Bank visiting mission in 1964. In 1980 PNGDB had made 33,127 loans - K134.6m - in all sectors of the economy. In 1980 the capital of the Bank was K27.1m, of which K24.2m had been advanced by direct government grants. The PNGDB Act requires it to provide finance for primary production and for the establishment or development of industrial or commercial undertakings, particularly small undertakings, in cases where the provision of finance is considered desirable but would not otherwise be available on reasonable and suitable terms and conditions. The provision of credit to export crops, especially 20 hectare coffee development projects, altered PNGDB’s pattern of lending because this credit was for agriculture only.^^

The design of the 20 hectare project development acceptable to the PNGDB was set out in two documents, Mick Wheeler’s (National DPI) ‘Coffee Development Plan’, May 1979 which contained the original 20 hectare model budget and Ian Oxenford’s (PNGDB), ‘Guide to PNG Development Bank Policy on 20 ha. Arabica Coffee Development’ 6 June, 1980 which set out the main policy guidelines for 20 hectare development. The documents assert that 20 hectare developments will be profitable, that the casualty rate of 20 hectare projects will be lessened by the payment of skilled plantation-style management on the block and that peasants will have responsibilities on their block - they must provide 'sweat equity' (free labour) in the early stages - but they will be rewarded for their labour contribution by the payment to them of a dividend in the early stages of coffee production and by the establishment on the block of a 'wet' coffee processing factory which would give them some control over the marketing of their coffee.
Wheeler's budget was based on the assumption that by Year 7 the 20 hectare projects would be producing coffee at the plantation yields of 2500 kg/hectare and that this would produce a cash return of K67,500 in Year 7 which works out as an average operating surplus (profit) of K20,050 from Year 10. The budget anticipated that loan funds would be provided to the project in the establishment years (to Year 5) but that these funds would only be a modest proportion (K63,7590) of the total establishment costs (of K98,310). This is because Wheeler budgeted for a significant equity contribution from business group members. This 'sweat equity' or self/help contribution was to take the form of 'free labour'. Wheeler costed this 'sweat equity' at K26,560 total contribution by Year 5. It was anticipated that 'free labour' from business group members would be responsible for the entire clearing, draining, fencing and planting of the block in the first year. 'Sweat equity' would also be necessary to maintain the nursery for the first 15 to 18 months and to contribute to the maintenance of the block (weeding and spadework) until production began in Year 4. Wheeler budgeted only for an equity contribution from business group members in the form of 'free labour' but Oxenfords 1980 policy statement extended equity contributions to include cash from various sources and the advance rental from the Lands Department for the 25 year agricultural lease a sum of K8000. It is important to understand that this K8000 equity contribution was never budgeted for by Wheeler. The comparatively small size of the loan (K63,750) to be drawn in Wheeler's budget is small only because of the major contribution made to the establishment of the project by 'sweat equity' contributions. If the business group could not be relied upon to contribute labour then it is obvious that a larger loan would be required to pay labour costs in the establishment phase.

Wheeler also detailed how loan funds would be drawn to purchase necessary inputs and to finance management costs and capital outlays. Among the inputs the project would require in the establishment phase and throughout the life of the project are fertiliser and seedlings. But the main outlay of loan funds in the establishment phase is to pay for management services and
capital outlays. The cost of management services budgetted for by Wheeler is a substantial proportion of the total loan. Wheeler budgetted for a management fee of K5000 from Year 1. This represents a total outlay of K25,000 over the five years which combined with the K12,500 assistant managers salary represent some 58% of total drawn loan funds to be spent on management services in Wheeler's original budget. Both Wheeler and Oxenford emphasised the importance to the success of the project of skilled management. Wheeler recommended and Oxenford made it obligatory that loan funds were conditional upon the signing of a management contract with a proven agency. The other major outlays were in Year 1 - K3750 for fencing and buildings - Year 2 - K5,000 for Resident managers House and Year 4 - K6000 for a wet factory and equipment. The final point to note about this basic outline of Wheeler's original budget is that the 20 hectare projects represent a long term investment. Even with 'sweat equity' contributions, skilled management and few failings or hold ups the loan would not be repaid until Year 14 (Wheeler 1979). The essential feature of Wheeler's budget is that while it extracts a contribution from the business group members or clan land owners in terms of equity contribution in the establishment phase it does balance this with a concern to provide some tangible and early benefits to the business group members by budgeting for a dividend to be paid to business group members from Year 7 when coffee is being produced at maximum yield and by budgeting for a wet factory to be built on the block in Year 4 so that the business group members or clan land owners can store coffee.

The total repayment made by the project in Wheeler's budget in year 7 is K16,000. Of this amount some K8,075 represents interest on the loan. This leaves a repayment of K7925 on the principal. But the important point to note is that the surplus available for repayment in that year is K21,760 (it is slightly less in subsequent years) leaving some K5,760 to be divided up among the business group members as a dividend payment from the operation of the block. In Wheeler's budget a similar dividend is paid every year from year 7 to Year 14 when the loan is paid off.
The provision of a wet factory in Year 4 is also an important concession to smallholders who generally prefer to process their coffee to the parchment stage. A 'wet' factory consists mainly of pulping machines to separate the hard outer casing from the bean itself, fermentation tubs so that the sticky mucilage substance can be removed from the bean, washing vats and outdoor drying areas. It is not a complex operation and the equipment is technically quite simple. It is often argued that processing to the parchment stage is not as economical for the smallholder as selling cherry. This may be true but from the smallholder viewpoint there are obviously other factors to consider. For one thing, processing coffee to the parchment stage allows coffee to be stored as a hedge against falling prices. Cherry, on the other hand has to be sold at prevailing prices the moment it is picked. Smallholders do not and cannot control marketing chains so that 'storing' coffee is the only means they have of regulating household incomes when prices are fluctuating. It is important to recognise that the provision of a wet factory and the cost of labour required to operate it was considered to be an economic proposition by Wheeler even under conditions of pessimistic price projections.

The PNGDB saw itself in the early stages of the design and establishment of the 20 hectare projects as playing an active role in ensuring that projects followed policy guidelines and budget requirements (Papua New Guinea Development Bank 1980). An important part of this active role was that the PNGDB be engaged in the defence of the interests of its clients - the business group. The PNGDB, it could be expected, would strive to maintain what one PNGDB officer called the 'spirit' of the policy design which was, as Wheeler's budget emphasises, the idea that projects were being developed to benefit the small peasant and to further enhance the development prospects of ordinary people in PNG. But did it have the capacity to play this active role and to ensure the 'spirit' of equity in the programme would be maintained?
Management

In Papua New Guinea the quality of managerial staff has come to be regarded as the greatest limitation to productivity/profitability in advanced forms of agriculture (McKillop, Williamson and Associates Pty Ltd 1982:108). We have seen that in the design of 20 hectare projects the provision of plantation-style management was regarded as crucial to the success of the projects by most state agencies and we have also seen that a large proportion of the outlay of loan funds in the development stages was to go to management. But what does 'management' mean and how was it to be provided to 20 hectare coffee projects? In the agreement between the business group and the management agency in the 20 hectare development management has a technical meaning.

Technical expertise does not come cheaply in Papua New Guinea. The original budget incorporated the view of the national Plantation Management Agency, NPMA, costings that a management fee of K250 per hectare or K5000 per annum was appropriate. The fee has been criticised as very high by economists and politicians though no official voice has been raised against the fees. So strong is the belief in Papua New Guinea that technical expertise is vital to success in agriculture that most have been willing to put up with this expense on the grounds expressed by Sir Julius Chan that 'If we want productive plantations we must pay management fees' (Chan, Draft Hansard, 7 September, 1981).

The exercise of these proper management techniques includes a coordinating function, one in which social actors (the production relations) and essential inputs (the productive forces) are brought together in certain combinations to produce coffee. It is at this point, where there exists some variation in the combination of forces and relations of production, that management operates as a system of social control. This is a position of power. The choice of management could determine the relative distribution of benefits from 20 hectare projects and ultimately of the whole development. In a situation where there appears to be a range of social actors with the requisite
skills to perform the management task, the design of projects which require management might inadvertently favour those with existing advantages in the area of social control - those with race, class or state authority - to become managers.

The problem then is to determine the optimal package of technical skills and social controls managers should have. In terms of the state acting as a manager, the 20 hectare development was designed at a time when the limits of a direct state agency role as manager were very evident. DPI, the obvious state agency to perform such a role, had become incompetent. We have already examined reasons for DPI incompetence such as the disruption to its services created by decentralisation which effectively split DPI into a separate national DPI and a provincial DPI to which we might add its growing tendency to concentrate its activities less on recurrent expenditure and more on NPEP projects the limited opportunities that existed for DPI extension activities due to its small proportion of the budget (6%). Whatever the reason, 20 hectare projects had to be planned and designed without any expectation of management assistance from DPI. Without DPI, which was the only department of the state with the technical skill to provide a direct management service, the agencies of the state could only expect to exercise some control over the social actors who were chosen to be managers.

The design guidelines of the projects suggested that the PNGDB would exercise complete control over the development of the project through the management agency. The PNGDB for example appointed managers only from approved agencies and the PNGDB could also initiate a termination of the management agreement if it was not working out after 3 months. The problem with the assumption that the PNGDB could exercise control over the block was, as we will see, that the provision of technical expertise, as provided by management agencies, can lead to direct social control over the block.

The social actors who were to be chosen to perform the management task were never precisely identified in the design documents but it was very clear from the beginning that this task was not to be
performed by members of the subordinate classes. These people were eliminated on the grounds of technical incompetence though it was thought the subordinate classes were able to be trained as managers. It was planned to

allow gradual introduction of increased levels of management and technology under conditions that will lead eventually to a member of the group taking over the management. (Department of Eastern Highlands, Division of Agriculture)

and Wheeler budgeted for on-the-job training for assistant managers. We will see however that the actual extent to which management training takes place on the block is dependent upon the good graces of the management agency. McKillop eliminated subordinate classes from the management role on the basis of cultural limitations. He quoted Moris favourably who noted that in general terms people from other cultures could not be trained in western managerial innovations (McKillop, Williamson and Associates Pty Ltd 1982:53). McKillop argues this would make it difficult for traditional organisations in Papua New Guinea to manage complex commercial activities.

This meant that the main social actors who would exercise the management function on 20 hectare projects would be those drawn from the dominant class. In Eastern Highlands the private management agencies, ANGCODEV and Gouna are the phenomenonal form of the dominant class fractions, the big peasantry and the petty bourgeoisie. The third agency, NPMA is a branch of the state. NPMA is a government corporation set up to provide management to the former expatriate plantations. NPMA had three times the number of blocks in its management control in 1982 as the other two agencies. NPMA designed the fee schedule and went into 20 hectare development to make money. ANGCODEV and GOUNA are NPMA’s chief rivals in the Eastern Highlands. ANGCODEV is a subsidiary of ANGCO, the country’s largest exporter. ANGCO is the base of big peasant interest in Eastern Highlands through its association with EHDC and people like Akepa Miakwe, Ben Sabumei and perhaps Iambakey Okuk. Gouna is the Development Corporation of the petty bourgeoisie.
20 Hectare Project Implementation

The implementation of many 20 hectare projects began in late 1979 after Wheeler's 'model' budget was accepted by the PNGDB and funds began to be released. From the beginning however there were real problems in coordinating the state agencies and actors involved. In early 1981 this lack of coordination in the state was still a problem and on 9th April, 1981 a meeting was held with the purpose of devising a series of 13 Steps (Table 26) which would set down clearly the order through the state agencies a 20 hectare application would follow. Throughout 1980 and into 1981 the lack of coordination among the state agencies severely affected the development of the 20 hectare projects. During this period it was not possible for management agencies to get more than six or seven projects a year to the application stage (McKillop, Williamson and Associates Pty Ltd 1982:105). It was taking over a year for the management agencies to bring a project to the funding stage. On 3rd June, 1981 a coffee growers meeting was held to try and sell the process established in the 13 steps to growers. The 13 steps were based on the assumption that DPI would play a coordinating role. It is very instructive to note that these early meetings uncover the assumptions held by state bureaucrats as to how coffee development will proceed. They know the 'state' is the innovator in the development but they assume this means that the state can control the process of development step by step. Their view is that the state may have to 'sell' the development to private actors but essentially they seem to consider that private actors exist at the margins of the coffee development scheme (Department of the Eastern Highlands, Office of Agriculture, Goroka. Coffee Development Scheme n.d.:1).

The growers who attended the 3rd June meeting were unimpressed with the 13 steps. They knew that DPI did not have the capacity to play a coordinating role as set down in the 13 steps. At the time DPI was claiming they could coordinate the 20 hectare development Kevin Murray was instructing DPI's Coffee Development teams (CDT) to concentrate on 5 hectares rather than 20 hectare plantations. In any case, by 1982 the CDT was in great difficulty for funding as the agricultural sectoral funds were
syphoned off by national politicians. In fact by 1982 the development of 20 hectare projects was moving beyond the control of the state branches. Rather than playing an instrumental role in determining which social actors got what out of the scheme state branches were being forced to respond to private social actors. The growers who attended the 3rd June meeting knew that it was the management agencies which had coopted the coordinating role from the state. They seemed to realise also that this made them very vulnerable to control by the management agencies (Eastern Highlands Provincial Government. Rural Land Development Grant. File 8-6-8). The 13 steps were made irrelevant by the coordinating role of the management agencies (Figure 6).

So successful were the management agencies at getting around the control of the state agencies that it was frequently argued that the state should virtually withdraw from this and other areas of agricultural development (World Bank 1981:10). Prime Minister Chan was known to favour this view (McKillop, Williamson & Associates Pty Ltd 1982:12) which certainly reflected his base of support in the big peasantry and McKillop seems to agree with it because he recommended that the government should withdraw from providing services and marketing in favour of the private sector (McKillop, Williamson & Associates Pty Ltd 1982:121) and goes further and suggests that the proper role of the state (or the public sector as he calls it) '... could well be that of arbitration and enforcement of commitments entered into by the various parties' (McKillop, Williamson & Associates Pty Ltd 1982:103).

There is, however, a curious paradox in this type of thinking especially as it relates to 20 hectare development because had the state adopted the role of arbiter or enforcer of commitments in 20 hectare development it is clear that the development would never have got off the ground. The state, as we have seen, had to be an innovator in the design stages, it had to initiate policies such as the lease/leaseback arrangement, it had to ensure that loan monies were available from international organisations and it had to create the loan facility for the disbursement of funds. The role of the state cannot be understood in these
simple polarised public/private terms because clearly there is so much overlap, so much complexity that the dichotomy is absolutely misleading. What we have seen in the policy design section is that the state has a good deal of autonomy at the design stage. By contrast in the implementation stage, the management agencies role becomes so dominant over 20 hectare development that the state almost appears to be an instrument in the hands of the dominant class. The state itself does not change as 20 hectare projects move from design to implementation so there must be something in the form and function of the state at this level which allows dominant classes to be dependent on the state at a stage when state innovation is required but which allows dominant classes to manipulate the state when the appropriation of surplus is a possibility.

How can this be explained? I argue in the following section that the Bonapartist form allows the state to be both autonomous and an instrument. It also allows the state to function in a way that accommodates the interests of the dominant class fractions. This is because the PNG state at this level has high functional autonomy, i.e., it is very heterogenous and divided into numerous, uncoordinated branches. This allowed innovation to occur in the design stage. It also allows as we will see management agencies to gain representation in parts of the state at the implementation stage and use that representation to make demands over and against other branches and institutions within the state apparatus. What all this means in practice, as I show in what follows, is that rather than the lack of coordination in the state undermining the development of the projects (as bureaucrats presume it will) dominant classes know that this lack of coordination is in their best interests for it an 'ideal' situation for them to be able to dominate and control the development and appropriate surplus from business group members.

Land

The procedure for bringing customary land into 20 hectare production was cumbersome, slow and fraught with administrative difficulties. The problem was partly caused by the fact that
there were three quite separate state agencies involved in land matters DPI (Office of Agriculture, Eastern Highlands Provincial Government), the Department of Community and Family Services, the Kiaps, (Eastern Highlands Provincial Government) and the Department of Lands, a national department. But more serious problems in the implementation of land policy on 20 hectare projects were caused by problems relating to land itself and in particular to the difficulty of identifying customary owners. Part of the problem of land investigation undertaken by the Kiaps is that the system of extending 'use rights' over land to influential people either inside or outside the clan immensely complicates the land ownership pattern. Land can be acceded to someone who may not own it but have the use of it for long periods of time. This is a feature of the traditional use of land and it is one that has made all attempts to register customary land useless. This pattern of 'use rights' can undo modern attempts to settle the customary land situation because the 'use right' system is very flexible. What the 'use right' system seems to allow is a sort of 'futures' dealing in land whereby you might stake a gamble that someone will use the land in a way that might prove very successful. At the same time you insure yourself against losing the land but if the 'use' its put to really does prove successful then the original owner can claim some benefits. This situation does cause problems and tends to undermine the trouble taken to establish a fixed settlement in the use of land even for the purposes of a lease/leaseback arrangement 20 hectare coffee development. The whole process is more malleable and flexible at the customary land owning level than more formal procedures such as land investigations can accommodate. The two tendencies noted by the District Officer were the tendency for control over the block to concentrate on business group leaders and the manipulation of customary land owners by powerful people in the area - were both happening in 1982 on 20 hectare coffee blocks. He admitted that the whole process of land investigation is a sham.

On the two most advanced blocks I investigated, Arusafa and Molan (both managed by Angcodev), the business group leader was employed as assistant manager. This was, however, the only
evidence of a business group presence on the blocks. Both Tom Neke of Molan and Makeyu Lekesavi of Arusafa claimed that the group had recognised that they had done all the work on the block during the development stages and therefore they were considered by the others to have earned rights over all the benefits coming from the block (Tom Neke, Interview 9/6/82 and Makeyu Lekesavi, Interview 9/6/82). This dropping away of support from ordinary business group members occurs not because their expectations are 'unrealistic' (May in McKillop, Williamson and Associates Pty Ltd 1982:114). It occurs because business group leaders and later management agencies are at work to 'disenfranchise' business group members so that 'no' or 'few' expectations are realised. Initially the social actor engaged in this process of 'disenfranchisement' is the leader of the business group. The business group leader lays claims to control over the business group and the land on the basis of 'use rights' rather than on the basis of claims made as the leader of the business group. The Business Group Act itself facilitates concentration of power on the leader in the group. However, the business group leaders claims to 'control' do not extend to claims of control over the operation of the block. In the process of 'disenfranchising' business group members from their land, business group leaders play directly into the hands of management agencies. This is where the real concentration of power and control over the block is exercised. On some blocks this concentration of power is greater than others. Equity considerations aside, the land procedures seemed not at all to be 'sorting out the land problems'. In fact, given the way in which customary landowners and business group members are being manipulated and outmanoeuvred bringing land into 20 hectare coffee development projects might be at the same time establishing the preconditions for creating a whole new wave of land disputes.

The appropriation of land from the smallholders by the powerful is a form of 'silent' class struggle. It is 'class' struggle when manipulation is systematically favouring a certain class with a certain location in a system of production. In this case, the managers are appropriating surplus from the smallholders (or customary landowners and ordinary business group members). The
class struggle is 'silent' because the structure-in-production is such that exploitation by the management agencies over the small holders is indirect. It must take the form of appropriation of surplus (money) and land. Even when the block is producing coffee it can only be said that management agencies are exploiting labour employed on the block. They are not, however, exploiting the smallholders directly. To add to these complex relations of exploitation on the block is the fact that management agencies have relied heavily on the state to set the pre-conditions for appropriation and exploitation. In the case of the 20 hectare projects we have seen how the state played a vital and innovative role in the design stages but it is true also in the implementation stage that the appropriation of land and surplus from a block by management agencies relies heavily on the facilitating role of the state. The state plays this facilitating role indirectly. The state is not an instrument in the hands of the management agencies but rather the form and function of the state does facilitate the dominance of management agencies over the block.

In relation to the land procedures on 20 hectare projects a number of aspects of the form and function of the state at this level facilitates the appropriation of land by management agencies. For a start management agencies are advantaged by the fact that in Papua New Guinea land procedures are exercised by different branches of the state at different national and local levels. The different levels of the state which deal with the land procedures has allowed some management agencies to subvert the lower levels of the state (DPI and Kiaps) and proceed directly to the centre (the Department of Lands). I was often told that it was because many management agencies were pushing their blocks ahead in the queue that the holdup was occurring at the Department of Lands in Waigani. Some even said that block applications were going to the Department of Lands regardless of the fact that the land investigation processes had either not been completed or had failed.

The management agencies could use their national reach, mainly through politicians to get a block application to the Department of Lands. The low political penetration in the state as it
relates to the coffee industry also enhances the appropriation of land and surplus by the management agencies. The states low political penetration both from the centre to the local area but also into the block itself meant that no part of the state could monitor every aspect of the land procedures to ensure the integrity of the customary landowners was protected and maintained. To achieve this it would have been necessary for a branch of the state to have an extension role on the block itself as well as a monitoring role at the centre on land procedures. The functional division of the state precludes this. The centralisation of some branches and the decentralisation of others also precludes such a monitoring role, (i.e., The Department of Lands is centralised and DPI is decentralised). DPI would be the most suitable agency to exercise this extension function but as we have already seen DPI never played this role on the 20 hectare blocks and the influence of DPI at the national level was probably even less than that a management agency could exercise over influential national politicians.

Also, and related to all of the above, the management agencies appropriation of land from smallholders was helped by the high functional autonomy in the state. The state’s role in land procedures was divided according to functions and processes and there was virtually no communication between the Kiaps (Administrative field officers) and the Department of Lands for example. The high functional autonomy and low political penetration in a state seems to allow development to take off with a rush in the design stage but the loss of communication and lack of a monitoring function means that the development is always vulnerable to manipulation by dominant classes. A final very important example will emphasise the point. There was no clear responsibility inside any state branch for informing the ordinary business group members and the customary land owners that the lease was for 25 years. Which branch should take this responsibility, Department of Lands, the Kiaps or DPI? It was never decided because it was probably not considered very important. By default the task has fallen upon business group leaders and management agencies but one cannot be confident that the full impact of this situation is made clear to the smallholders. In fact, it is very difficult indeed to explain to
illiterate and innumerate people this type of long term concept. One cannot be confident a great deal of care is taken on this point. Nevertheless all business group leaders and management agencies assured me that the people had been properly informed and in any case they usually added, the lease will be surrendered to the people after the block is paid off. Even so, the lease remains valid for 25 years and it would seem proper for a state agency to take responsibility for informing people of this.

Credit

At the same time that land procedures are occurring on a 20 hectare project a budget proposal and a loan request resulting in the eventual release of funds for development will have begun. There are three main stages in this process. First, a proposed budget is submitted to PNGDB by the management agency. Second, PNGDB process a loan request from the management agency and PNGDB extension staff visit the block to assess the adequacy of preparatory work. Third, Project funds are released after land title is secured. The Budget, drawn up by the management agency on behalf of the business group, is the single most important document of the 20 hectare project because the budget locks all the actors - state agencies, management agencies, business group members - into a course of future development on the block.

An examination of three budgets, Arusafa business group, Safakofi Pty Ltd and Nipiamoka business group shows that while each project draws a similar amount of funds (around K77,000) there is great variation in the way these funds are used. For example, while Wheeler anticipated a payout period of some 14 years but Safakofi and Nipiamoka are budgeted to take less than 10 years to pay out the loan. How realistic are these budgets and what is the difference between them and Arusafa? Both Arusafa and Safakofi are ANGCO-managed so the cost structure of inputs is similar. This is the case with the cost of labour inputs (K20,708 in Year 5 of Safakofi and K18,297 in Year 5 of Arusafa). There are however, large differences in the cost of fertiliser for both blocks. In Year 5 Arusafa is paying some K17,296 for
fertiliser whereas Safakofi is paying out K11,154 for fertiliser in Year 5. This could of course be the result of agronomic differences on the two blocks. Further differences in the cost structure of these two blocks are in the areas of management fees and capital costs. Arusafa is paying a very high proportion of its total costs in management fees. The usual K5000 management fee is budgeted for but so too is what is called 'Supervision' in the budget. Wheeler budgetted for an assistant manager salary of some K4000 in year 7 whereas Arusafa are paying some K6800 in Year 7 for 'supervision' as well as the K5000 management fee. Safokofi on the other hand are paying K4000 assistant manager salary in Year 7 and no management fee after year 5. Safakofi seem to be getting special treatment from their management agency while Arusafa seem to be paying quite a bit extra to retain the services of management. 44 ANGCO justifies the extra management expense on Arusafa by claiming the assistant manager is actually a field manager and that this position will disappear when an assistant manager from the business group is trained to be the assistant manager.

The other big difference in the budget between Arusafa and Safakofi is the different capital costs incurred by each project. Neither project incurs the cost of a wet processing plant which was budgetted for by Wheeler but both incur a capital cost which Wheeler did not predict this is the cost of seedlings. On Arusafa seedlings up to 20 months old were provided by the management agency at a cost of 20 toea each delivered by the management agency at a grand capital cost of some K14,000. Safakofi paid K6000 for its seedlings. Wheeler envisaged that seed would be provided free by DPI and that seedlings could be obtained from nurseries funded by the CIB or from nurseries on the block or if purchased, at 5 toea each. ANGCO have forbidden their block holders from establishing a nursery and has insisted on providing its own seedlings.

There may be very good reasons for the variations in these budgets compared with Wheeler's original budget but the main point to note is that there is tremendous latitude for the management agencies in putting budgets together and that few
questions are raised by PNGDB on variations. This latitude is evident in the Nipiamoka budget also where NPMA calculates an income at K1600 per tonne which is far too high while it seems to underestimate the cost of labour (K3,323 in Year 5) required. There is a good deal of room for manoeuvre on the part of the management agency. The difference between the apparent perpetual dependence of Arusafa on the management agency and the quick release of Safakofi is best understood in class terms because Safakofi is owned by the Sabumeis’, a dominant big peasant family. Ben Sabumei explained the terms of the loan to Jeff and Beijo Sabumei. Sabumei has used the full resources of his position to ensure that Safakofi has access to various state services and that it will not remain too dependent on ANGCO.

The management agencies are not only systematically appropriating surplus monies from blockholders they are also engaged in 'silent' class struggle against the smallholders whose interests they are paid to defend. The appropriation of monies by management agencies is quite sizable. The management agencies have control over the original K8000 paid by the government for the lease from the customary owners. The management agencies also control the K3000 government subsidy for the pre-loan period during which time they supervise clearing, lining and holing and planting out of the block. As soon as the loan is made available they have access to K6000 per year for a twenty hectare block in management fees, plus at least K2500 per year in assistant managers fees. We have already seen how the manipulation of the assistant managers fees occurs but much worse cases were discovered in the course of investigation. On many blocks, the assistant managers fee is not paid. In some cases, a business group leader acts as 'field supervisor' on rural minimum wages or a management agency field supervisor is hired on the rural minimum wage.

There are other less direct ways in which management agencies can benefit financially from control over 20 hectare blocks. The management agencies are normally large organisations which are active in all areas of the coffee marketing chain. As we have seen they may choose to charge blocks for inputs which only they...
can supply. The price of such inputs is checked by the PNGDB so it is rare for this price to be inflated but this is nevertheless good business for other aspects of a management agency operation. The management agencies also benefit from the charge of liquid funds which are made available to them for the 20 hectare blocks every quarter. It is not known quite how management agencies manipulate their complex operations to take advantage of this charge of liquid funds but so unpredictable are their requests for funding every quarter - sometimes late, sometimes early - that one can only assume these liquid funds are being moved around within the organisation to finance other short-term projects. One management agency (Gouna) complained about the slowness of getting quarterly advances from PNGDB.

Our blocks then have to get bridging finance which is expensive. Gouna does this by giving them an advance on coffee sales if we have trouble with our advances. We never stop work. That would cost more in the end. (Andes Berquist, Interview 10/6/82)

But on the other hand Gouna could benefit from the interest received on bridging finance if this was supplied by the agency itself and by the delay to the loan payout which results from the mortgaging of coffee sales. This was the same agency whose actions puzzled a PNGDB officer because they were always so late in their requests for quarterly advances.45 It should be clear that there are numerous ways in which the management agencies can benefit financially from control of the loan funds.

The management agencies are also acting as a dominant class to disorganise and subordinate the 'budding' middle peasant business group members and customary landowners. The principal instrument of management agency control over a 20 hectare project is the budget. Wheeler’s original budget, it will be recalled, contained two provisions which showed consideration of the interests of the smallholders, measures which would have given the smallholder a base in accumulation and a potential for middle peasant class formation. The first of these provisions was a dividend to business group members which would be awarded in Year 7 when the block reached maximum coffee production. The
second of these was the provision of a 'wet' processing factory on the block. Both these provisions have disappeared in the implementation of 20 hectare projects. There is no dividend budgetted for on any 20 hectare project in Eastern Highlands province. The management agencies are unanimous in their belief that money should not return to 'clansmen' until the loan has been paid out and this has also become the firm policy of the PNGDB. This is a particularly short sighted and unnecessary policy. Is it possible to imagine smallholders watching passively as coffee is produced on their land and them not getting a share in it for a period of over 10 years in most cases? This decision shows how acquisitive the management agencies have become and it also shows the lengths to which they will go to mobilise against the subordinate classes.

The failure to budget for a 'wet' processing factory on the block applies mainly to private management agencies, ANGCO and Gouna. NPMA will allow a part of the crop to be processed on the block if business group members insist upon it (Tom Leydon, Interview, 23/6/82). The absence of a 'wet' factory on Gouna and ANGCO blocks means that cherry must be taken off the block the moment it is harvested. This is because cherry can not be stored. Cherry begins to deteriorate immediately it is picked. When smallholders sell cherry they usually take it to the roadside and sell it to a passing buyer but the 20 hectare development is a far too professional operation for cherry to be sold in this way. Rather on Gouna and Angco managed blocks, cherry will be taken off the block the moment it is harvested by management company trucks and transported to the processing plant. Coffee from 20 hectare projects managed by ANGCO is sold to Goroka Coffee Pty Ltd for processing, an ANGCO owned company (Tom Neke, Interview 9/6/82 and Makeyo Lekesavi, Interview, 9/6/82). It is hard to justify the tying of the processing of a crop to a processor owned by the management agency, but McKillop's arguments come closest for he argues that a private system of marketing is 'efficient' because DPI could never have provided a marketing structure equivalent to that provided by the management agencies. He argues that the failure of DPI or the government to offer a critically important adequate and efficient marketing services
suggests that marketing '... is a function demanding innovative management skills' (McKillop, Williamson and Associates Pty Ltd 1982:50). But even if this is accurate it does not justify marketing tied to the provision of management services on a block. In most of EHP the marketing of coffee has never depended on government. Private marketing is available. It would seem to be in the greatest interests of the block that processors bid competitively for the right to process coffee from the block.

It has been shown that the 'credit' or budget stage of the implementation of the 20 hectare projects has been almost entirely 'captured' by management agencies who have used their control over the budgets to appropriate surplus from the blocks and to forestall middle peasant class formation. How has the PNGDB allowed this to happen especially in view of its intention to play an active role in the implementation of the projects? Also, how can one explain statements by people who work in management agencies that '... as far as 20 hectare blocks go, policy is dictated by the Development Bank. They are the ones who call the shots (Bill Lloyd, Interview, 7/6/82). Part of the answer to this question is that the PNGDB has not been able to overcome its low political penetration. PNGDB has not managed to achieve penetration of the block itself by maintaining a keen extension presence. This would be necessary if PNGDB were to properly control demands made at the level of production. PNGDB has not overcome the difficulty that while it can control the supply side of budgeting - through the release of funds - it has no control over the demand side of budgeting on the block. Despite the fact that PNGDB was employing two very able field officers at the Goroka branch in 1982 the on-the-block checking function of these officers was very limited. The management agencies use of labour was checked on the block from time to time but most checks on expenditure were done in the PNGDB office.

On-the-block checking by the PNGDB became less frequent as the block developed but it was at this stage that the checking function was most needed because by then large amounts of money were involved. For example, the PNGDB extension officer I travelled with constantly expressed surprise when we found out
people were not being paid the assistant managers' salary when that salary was being drawn by the management agency. He said, 'I will check it out back at the office' but it was clear there was no possibility of ongoing checks of this kind while the PNGDB was only checking the supply side of the budget and while the management agency had complete control over the demand of funds on the block itself.

The other reason why the PNGDB failed to control the activities of the management agency and insist upon the 'spirit' of the original conception of 20 hectare development is because the state has a high functional autonomy in the coffee industry. This high functional autonomy in the state as a whole means that the function of checking budgets and loan requests from management agencies falls to the PNGDB and to the PNGDB alone. No other state agency could intrude on this functional responsibility of PNGDB and those who do take an interest in such matters, such as DPI, are treated with intense hostility by the PNGDB. In a Bonapartist state with high functional autonomy state agencies will jealously guard their autonomy vis-a-vis other state agencies. This hostility and competitiveness between branches of a state in a Bonapartist state with high functional autonomy has only one possible outcome. Branches of the state are driven into collusion not with other branches of the state but with other social actors. In the implementation of 20 hectare projects collusion is most evident between management agencies and the PNGDB in circumstances where the management agencies and the PNGDB perceive a threat from the subordinate classes to the development itself.

Management

In the design section on management it was shown that management could be defined as both technical expertise and as a system of social control. It was suggested in that section that technical expertise as provided by management agencies can lead directly to social control. So far we have seen how the strategic location of the management agency gave it social control vis-a-vis state agencies over land procedures and controls of 20 hectare
development budgets. In this section I turn to the question of how the management agencies operated on the block itself. Did the management agencies use their technical expertise to provide a demonstration effect for business group members so that they could eventually take over management of the block or did management turn its technical expertise into a system of social control of business group members so that their involvement on the block was suppressed? I show in this section that management agencies did properly perform the technical role on the projects. Management agencies did not short-change projects either in terms of management time spent on the blocks or in the management services it provided. There is no evidence of any block failing because a management agency did not fulfill its responsibilities. However, I also show that management agencies had a limited view of the extent of business group involvement on the block. The three management agencies in Eastern Highlands Province - Gouna, ANGCO and NPMA tended to view business group members more as minority shareholders than as partners in the operation of the project. Some agencies (Gouna) were more extreme than others (NPMA) in forbidding business groups a role on the block. All agencies however, tended to be hostile toward business group members more in the manner of 'silent' class struggle than as demonstrators of management techniques to business group members. Business group members rarely challenge directly the exercise of social control by the management agencies over their block.

The amount of time managers spend on the actual projects depends on the stage of development of the project and the internal structure of the management agency itself. My survey revealed that management agencies tended to spend a good deal of time on blocks in the pre-loan stages on the original blocks they established. This pre-loan work is very rudimentary and the management agencies soon realised they did not need to provide highly trained personnel to the block until the loan comes through. On later blocks, ANGCO provides a full time female agricultural assistant to help with the pre-loan work but it is a very low key operation at this stage. Sometimes this 'sweat equity' work is carried on by business group members as in
Wheeler's original budget but as we will see in the next section this depends very much upon the management agency's philosophy toward business group involvement on the block.

The management agencies have different philosophies to managing a block. This philosophy in turn stems directly from their different locations within the dominant classes of the private management agencies, Gouna and ANGCO. In their attitude to business group members and their approach to management Gouna, a petty bourgeois company, displays precisely the emphasis on 'business practice' and 'sound management' one would expect from the petty bourgeoisie. ANGCO on the other hand, a big peasant company, displays the big peasant tendency of using any and every avenue, including clan connections, to increase its flow of profit. In other words, the petty bourgeoisie used to realising relative surplus value in its commercial enterprises manages the blocks purely on factory agricultural lines. ANGCO, which profits from the production of absolute surplus value, manages blocks in a way that allows them room to fiddle and deal to extend the working day in order to increase profits. It is this 'class' orientation in management that is much more important in terms of its impact upon business group members in the 'silent' class struggle than the formal public or private ownership of the management agencies. NPMA ostensibly a public company operates in a way similar to ANGCO in terms of its impact upon business group members.

The different class orientations of the private management agencies and NPMA's indeterminate class position can be shown if we look at the three agencies attitudes to the role of business group members on the blocks. In particular we can examine the agencies view of the contribution of 'free labour' - the 'sweat equity' stage - and the agencies' approach to training a business group member to eventually take over management of the block. It will be recalled that both these forms of business group involvement were allowed for in Wheeler's original budget and Oxenford's PNGDB policy statement. Gouna will not allow business group member involvement on the block at all. John Leahy, Gouna's Papua New Guinean coffee projects manager said
Our policy is to run blocks on a business basis. We believe they must not slip back to a village level. There is no way of disciplining people if they work for half price. The Wantok system is antipathetic to good business practice. (John Leahy, interview 10/6/82)

Gouna will not allow business group members to contribute 'sweat equity' to the block. This policy must add considerably to the size of the loan on Gouna blocks and to the length of time it will take to pay out the loan. This could not be confirmed without access to Gouna’s budgets but it is known that in some cases, and this probably applies to some Gouna blocks, some well-off men were prepared to finance pre-loan work out of their own pockets rather than be obligated to other business group members. Gouna will not allow business group members to work as paid labour on the block either. Andes Berquist, Gouna’s expatriate financial advisor explained that we have a policy of avoiding employing people from this area. The reasons for this are because Wantoks want to have a big mau mau all the time and because we are trying to teach people to run their blocks as a business. We insist that blocks take on outsiders both as managers and labourers. The group should be the owners and they should get other people to run it. Not one of the assistant managers is from a business group. (Andes Berquist, interview 10 June 1982)

Gouna believes it would be harder to discipline assistant managers if they were subject to claims from the clan. For this reason Gouna will not train business group members to become managers or assistant managers of their blocks. As it is Gouna has established very tight discipline over its managers by encouraging competition between them and by keeping them circulating throughout the Gouna organisation. This 'business' approach of Gouna is applied to all stages of the implementation of the 20 hectare development where specialist skills can be exercised.48

Gouna’s refusal to allow business group members a role on the block is justified on an ethnocentric basis. Gouna argues that if business group members were given any role on the block at all they would be swayed by clan pressure to ignore proper business practices. This is, however, a selective argument because Gouna
does not, cannot, take this approach to all business group members. Auwo Ketauwo and Isembo Olekevea are business group members with blocks that are managed by Gouna but because they are Gouna directors they have extensive involvement in their own, and others, blocks. The argument put forward by Gouna is in fact an argument for class domination because Gouna's real position is not that all business group members are unable to practice proper business behaviour but rather that some powerful people should be able to dominate development on the projects. Gouna's role in a system of dominance, in a 'silent' class struggle is to use an ideological screen based on talk of 'proper business practice' and 'clan interference' to justify exclusion of ordinary business group members from any involvement on their block. They claim proudly that

"Business group members must come into head office if they want to know anything about their block. The business group knows they can not interfere. (Andes Berquist, interview, 10/6/82)"

Gouna is also engaged in ensuring the maintenance of its dominance in the 'silent' class struggle by establishing networks of dependence - through specialised pruning, company transport, tied processing, restricted knowledge of management practices - for every block. These patterns of dependence will be hard to break even when the loan is paid out.

ANGCO's policy on business group involvement is almost the exact opposite to that of Gouna. ANGCO's aim is to reduce costs and to squeeze the maximum amount of free labour it can out of business group members. ANGCO has learnt through its operation of larger plantations where it produces absolute surplus value that profits can be substantially increased not only by developing a sophisticated division of labour on a plantation as Gouna does but also by having labour work harder (greater labour productivity) and longer (extending the working day) for delayed payment if possible. This is the kind of labour practice that occurred under the old agreement system in colonial times. Today, the big peasant controlled ANGCO corporation is trying to encourage business group members to work on their own land as 'agreement' labour. Bill Lloyd, expatriate manager of ANGCODEV
explained ANGCO's philosophy as being to reduce labour costs by encouraging members of business groups to work free (Bill Lloyd, interview, 7/6/82).

ANGCO seems to rely very heavily on business group members to labour free during the pre-loan phase. If they do not, the block will not go ahead. But ANGCO's real innovation is to attempt to encourage the business group members to labour 'free' on the project after the loan money has been approved. They have attempted to put this into practice by developing a roster system whereby business group members are rostered to labour free on a certain day on their ANGCO-managed block. As Bill Lloyd explained,

We try to get business group members to continue to work well after the project is planted up. We give them a shareholding equivalent to what their wages would be. This shareholding or 'work mark' is registered in a work book. This time is converted into shareholdings which is the proportion by which they will receive a share of any dividends. This [free labour] cuts down on labour so the less they eventually have to pay back. (Bill Lloyd, interview, 7/6/82)

It is this system that I am calling 'agreement labour'. The system is dubious to say the least. It is dubious not only because of the possibility that 'work books' can be lost as happened on Molan (Tom Neke, Interview, 9/6/82) not only because, as on Safakofi, so few of the business group members turned up to labour free anyway (Jeff Sabumei, Interview 10/6/82) but also because there is no dividend in sight for most business group members for about 10 years.

ANGCO is not prepared to appoint business group members as managers because

we think it best if we don't have any interference from the people we are developing the block for. Such interference just confuses the whole issue. (Bill Lloyd, interview, 7/6/82)

The typical ANGCO manager is a national, agriculturally trained, responsible for 1 to 5 blocks and living on site on one of them. ANGCO is however prepared to appoint business group members as
assistant managers providing they follow instructions. It is not clear whether such an appointment is a position from which the assistant manager will be trained to be a manager or not. ANGCO's standard reply to the question is that it is too early to begin management training of assistant managers. Some assistant managers such as Jeff Sabumei of Safakofi assume they will be trained as managers to take over their block as soon as possible. Others are convinced that they are being trained as managers already because they exercise a good deal of control over the labourers. They do not have however an agreement from ANGCO as to when they would take over. It was impossible to tell in 1982 what ANGCO's position was on training business group members as managers really was although it was clear, at that stage, that ANGCO had not undertaken any training of business group members to take over their blocks.

NPMA's management philosophy lies somewhat midway between that of Gouna and ANGCO. Rex Naug, Manager of NPMA, emphasised that business group members contribute 'sweat equity' on NPMA managed blocks if the project is to go ahead. This work involves planting seeds in a nursery, clearing and fencing. NPMA's policy is, however, that no business group members will work free on the project after the 'sweat equity' stage. NPMA does allow business group members to labour for a wage on their project but as Tom Leydon, senior manager for NPMA says their interest wanes (Tom Leydon, Interview, 23/6/82). NPMA seem to allow for the greatest involvement of business group members on the block and to be closer to the spirit of the original agreement than the private management agencies. However lest it be thought that a state agency is a progressive force in PNG we must add that there were severe limits to the extent to which NPMA was prepared to tolerate interference from business group members. Business Group members could be involved if they accepted that NPM would continue into the foreseeable future to coordinate the project and exercise the management function and if they left all decision making to NPMA.
Conclusion

In this section I have examined the design and implementation of the 20 hectare projects in the areas of land, credit and provision of management. The conclusion of the section with 1982 data is that the land and surplus monies of smallholders have been 'captured' by the big peasants and the petty bourgeoisie and that smallholders have been 'disenfranchised' on their own blocks. I have cited specifically the flaws in the design of land, credit and management all of which ended up allowing the management agencies to initiate and control the pooling of land, allowed them to neutralise business group involvement, allowed them to control budgets, allowed them to decide that the business group would not receive a dividend until the loan was paid out and allowed them to prohibit processing on the block (except for NPMA blocks). Also, the management agencies have managed to tie the coffee produced on a block to their own marketing network so that blocks may never be freed from dependence on management agencies. To add to all this, I have shown that management agencies are making good profits for minimal risks out of 20 hectare development projects.
Endnotes

1. *This figure* (1000 tons) is worked out from Table 6 which shows PNG total exports to Annex A countries - excluding Australia - was 15,000 tons in 1971/72. The 13% reduction of quota occurring in the first half of the year would have affected 7,500 tons. A 13% reduction of 7,500 tons would equal 975 tons.

2. Though these deals have often left the whole ownership question unresolved because in some cases nationals who own plantations are not in possession of formal freehold titles.

3. *The PRS* - or more properly the take-over of plantations by nationals - did not have the negative economic consequences in coffee that were thought to be possible. The take-over of plantations by nationals did not lead to abandonment of plantations or drastic falls in production as occurred in cocoa, copra and rubber. However this was probably a result of the different circumstances in these industries and not caused by national take-overs at all. The Committee of Review into the Plantation Redistribution Scheme, 1978 did emphasise that new owners lacked management skills and considered this to be a cause for concern. The PRS was abandoned by the National-PPP government in 1980 but by then it had done its work in the coffee industry and could be said to have achieved its limited aims albeit indirectly. The PRS mainly succeeded in bringing pressure to bear on Europeans to sell and to sell at reasonable prices, it encouraged a climate for national take-over and was abandoned at a time when an almost complete national ownership of plantations in Eastern Highlands had been achieved.


5. Recall (Chapter One) that class location is established according to the structure-in-production existing within an industry. This structure-in-production gives rise to an
exploited and exploiting class, sometimes to fractions of these classes and often to intermediate social categories. Class location is a study of exploitation on traditional marxist criteria. It is a study of the ownership of the means of production and the manner by which surplus value is appropriated from those who sell their labour.

6. A survey undertaken by the Coffee Industry Board (CIB) indicated that nearly 80% of known plantations have been transferred, or are in the process of being transferred, to Papua New Guinea citizens. (Papua New Guinea Coffee Industry Board, Report and Financial Statements, 30 September 1980, p.21)

7. It is also evident that at times the production of absolute surplus value may be counter productive because it seems likely that the intensity of work done by a labourer may fall the longer the person labours.

8. The same point can be made as regards the care (weeding etc) of the coffee tree for while some progress has been made in the use of new techniques such as herbicides there are limits to which these can be used especially when the plant is young. Shade trees can also be used to help cut weed growth but excess shade reduces protection so there are limits in the use of shade also. The year-round care of the coffee tree is also labour intensive compared with crops such as cocoa and there seems to be few ways in which the manual spading and weeding, by, unskilled labourers can be replaced by the development of new techniques.

9. Even today, big peasants are attempting to lengthen the working day by either not paying or delaying payment for work done over and above that of the ordinary day. In Eastern Highlands, ANGCO uses an ingenious strategy to try and get members of the business group owners to work free on the 20 hectare blocks that ANGCO manages. The strategy involves the keeping, of a book to record 'free' work done so that dividends can be allocated on the basis of work done. There
is no sign of any dividends yet on any of ANGCO's blocks though ANGCO can of course argue that even if business group members are not paid for their labour they are the ultimate beneficiaries of any work done on their blocks.

10. Such as Pacific helicopters new helicopter, a French aerospatiale Ecuriel AS350B which cost almost K300,000. The helicopter carries five passengers, has three cargo compartments and an average cruise speed of 115 kts. It has a hook load capacity of 750kg. (*Post Courier*, January 29, 1981)

11. Antagonistic classes - exploiters and exploited at the level of production - are determined to alter the relationship between necessary labour time and surplus labour time in fundamentally different ways.

12. Surplus value is of course the excess value created in the course of the capitalist production process. Marx argues that this excess value comes from the fact that capital pays labour the amount socially necessary to ensure the reproduction of labour power but in return has the right to consume labour power for a period well in excess of that needed to create its use value. It is the ratio of this unpaid labour time (surplus labour) over that part of capital represented by labour power (variable capital) which gives the rate of surplus value, the source of the capitalists profit and the true measure of exploitation (Kay 1979:46). One need not provide empirical evidence to show that capitalist coffee farmers are continually attempting to prolong the working day or intensifying labour to shows that they are producing absolute surplus value. They are producing absolute surplus value simply in the act of hiring labour and paying it at its market price. Just as capitalists do not have to act to reduce wages to be engaged in exploitation they do not have to prolong further the working day to be benefiting from the gap between the payment socially necessary to reproduce labour power and the use to which labour is put. The potential antagonism between class
fractions arises when the various ways of widening the gap reach limits inherent in the production process itself, when the working day can be prolonged no further, when wages cannot be reduced, and most importantly when new and better machinery can not be combined with labour power to make labour power more productive. When this happens capitalists can only increase profits outside the realm of production, in the process of exchange at a time of economic growth and/or by receiving beneficial treatment from the state.


14. ANGCO is vertically integrated in the coffee industry owning outright a number of coffee processing factories such as Wahgi Valley Coffee Company Pty Ltd, Kaga Muga Coffee Producers Pty Ltd and Goroka Coffee Producers (Figure 5).

15. The decision was made by the National executive Council in April 1981. (Post Courier, May 8, 1981)


17. Total loans approved to the coffee industry by the Development Bank in 1979 was K1,787,000; in 1980 it was K3,398,000. (Papua New Guinea Development Bank - Annual Reports and Financial Statements 1980)

18. In the opinion of the World Bank

It is not clear whether over capacity exists in the (dry processing) industry' (The World Bank Projects Department, Agriculture Division II East Asia and Pacific Regional Office, Country sector report Papua New Guinea. Agricultural Services Review (two volumes combined) Report No. 3161 - Papua New Guinea, January 30, 1981 Annex E:2)
19. The sectoral funds issue and its impact on the coffee industry will be discussed in some detail in the twenty hectare study in the class relations (subjective) section.

20. The fact that the patterns of coffee trade between nations changes does not negate my argument in Chapter 2 that world coffee flows are largely determined by 'taste' factors. A change in country trade patterns may not alter at all 'taste' patterns. It can be just that an old importer with a certain taste preference is replaced by a new importer with the same taste preference.

21. Though it is an overstatement to say that the CIB 'created' the system at the export level (Hassall and Associates 1982:173). Rather it would be more correct to consider the present system as the outcome of a struggle for licensing in which some firms picked themselves and that this emerging oligopoly of exporters was legitimated by the CIB.

22. Hassall and Associates note that Harrison and Crosfield's 'are operating on a margin of K200 per ton for ICO member markets and K60-70 for non-member market coffee.' (Hassall and Associates 1982:72)

23. We have to accept that this is more easily said than done. The coffee industry in Papua New Guinea is politically volatile and as the Post Courier noted there is a certain secrecy about any new developments in the industry. (Post Courier, May 1, 1981) The information contained in the Hassall Report (1982) upon which this section is based was available to the CIB and Hassall only because it was gathered at a time when the CIB was paying bounties. This gave the CIB the leverage to demand this information. One of the recommendations of the Hassall Report is that the CIB activities '...which should be strengthened and streamlined are contract scrutiny and analysis, policy and statistical/economic analysis and industry liaison' (Hassall and Associates 1982:7)
24. We should not be disturbed at the sudden appearance of 'territoriality' in the analysis for as Harvey (1982) noted that class struggle and factional conflict assume a spatial, often territorial, aspect under capitalism is undeniable. Phenomena of this sort are often explained away as the product of deep-seated human sentiments – loyalties to place, 'the land', community and nation that spawn civic pride, regionalism, nationalism etc. But the preceding analysis allows us to explain the regionalisation of class and factional struggle independently of such sentiments. I do not mean to imply by this that human sentiments play no role in interregional conflict, or that conflicts cannot autonomously arise on such bases I simply want to assert that the material basis exists, within the circulation process of capital itself, for interregional manifestations of class and factional struggle. (Harvey 1982:419)

25. This figure of 70% has encouraged many in the industry to argue that '...the Papua New Guinea farmer gets a higher proportion of F.O.B. than farmers in other countries.' (Richard Doery, Interview 10/5/82)

26. The CIB view on the question of coffee borders is clear. The Board is adamantly opposed to provincial Governments or any other authority being given power to introduce controls within the coffee industry which could in any way run counter to provisions introduced by the Board under its powers which are derived from a National Act. With the introduction of the Coffee (Mobile Buyers) Licensing Act, 1979 the National government has created a situation where the Coffee Industry Board under its Act can allow all coffee buyers to deal in coffee without any restrictions in the Chimbu province (and it has) while the Simbu Provincial Government says only those buyers whom it licenses may deal in coffee in the area. The Board has attempted to obtain a clear decision on which ACT prevails in this case, but advice indicates that it may be necessary to have the matter tested in a court of law to achieve a final solution. (Papua New Guinea Coffee Industry Board 1979:16)

27. The other major way in which Provincial governments can increase their revenue is by making profits in the market through their provincial government business arm. The idea of the establishment of provincial government business arms
stemmed from the success of the private Development Corporations. This experience suggested that support for Provincial Government Development Corporations (along the lines of the very successful Bougainville Development Corporation) might give them further financial autonomy. Thus the 1976/77 National Budget, announced interest-free loans of K100,000 to assist in the establishment and growth of Provincial Government Development Corporations. The loans were to be repayable in five years from future revenue. These loans have been taken up by all provinces. The loans were made to the provincial government and so are to be repaid by the province as a whole and not necessarily by the Department Corporation directly (Department of Decentralisation:7).

The loan for Nokondi, the Eastern Highlands Provincial Government business arm, was due on March 31, 1982 but the date passed without payment and no one seriously expects these loans to be paid back. Good and Donaldson saw Nokondi as the main class effect that provincial government might have in the Eastern Highlands for they envisaged Nokondi operating as a form of 'state capitalism'. They predicted that Nokondi would threaten to the private development corporations, Gouna and Eastern Highlands Development Corporation, and that class fractional representatives in the provincial government would use their representation in the Provincial Assembly to undermine Nokondi (Good and Donaldson 1980:52). Nokondi's pattern of purchases do suggest, and Good and Donaldson flirt with this idea, that Nokondi has been captured by the petty bourgeoisie. However this view ignores the self-expressed role of Nokondi which is to be, like the Investment Corporation at the national level, a mere shareholding firm which will seek back its holdings to locals when they can afford them. Nokondi is a small operation which like most Provincial Government Development Corporations simply does not have the management capacity to do more than hold shares. It has defined its role as financial and shareholding and thus could not be considered to have the potential for generating the class effects that Good and Donaldson imagined.
28. Bill Lawrence ex-secretary of DPI told me

The Coffee Industry Board represents plantations but this offer did not coincide with DPI's position for we have always felt that the smallholders come first and plantations come second. Smallholders have a greater need for extension work and have acute credit problems. (Bill Lawrence, Interview, 13/5/82)

29. In the Papua New Guinea, 'Rural Industries' 1974/75 (Port Moresby: Bureau of Statistics, December 1977) It was stated that

This issue of the rural industries bulletin contains less information on production from smallholders for some years than for others because it has not been possible for the field staff of Primary Industry to compile for all years, estimates of cropping activity for the numerous, widely scattered smallholdings. The Department is at present developing a system of sample surveys of smallholdings which will eventually cover all production for sale and may cover production of agricultural products for own consumption as well. The statistics on smallholdings production in this issue have been derived by the Department of Primary Industry from the records of marketing authorities produce inspectors reports and cash purchase accounts.


30. The following quote shows the degree of working autonomy that now exists between the CIB and the Minister. The CIB reported

During the year the Board invited the Minister to attend a meeting to meet and familiarise himself with the Board and its work, but due to work commitments he was unable to attend. Although a board delegation met with the Minister, Mr Evara in April to discuss issues this was arranged only after great difficulty and a number of postponements. Unfortunately, the meeting took place in a strained atmosphere, was of short duration and concluded prematurely. The Board expresses regret that its relationship with the
Minister, Mr Evara for most of the year was not as concordant as it had been with previous Ministers. (Papua New Guinea Coffee Industry Board, 1979:5)

31. This is an export tax on the coffee industry which applies or does not apply depending on the international price. When the export tax is applied the rate is usually about 2 1/2% FOB (Densley n.d.:19) Export tax is not a major issue in the industry as it is in most other coffee producing countries. The government gets little from the industry directly and gives little back. As Ian McChlerey, Executive Officer of the Coffee Industry Board commented

Finance department and the Government give nothing to the industry. They think it is self supporting and why not - there are other more important agricultural areas. Last year (1981) they took the 2 1/2% export tax off. We did not ask them to do it. (Ian McChlerey, Interview, 21/6/82)

32. And this distance from large growers and exporters has been maintained despite the frequent charges to the contrary. In 1980 for example, James Yanepa charged that the CIB was favouring ANGCO. (Post Courier, December 11, 1980)

33. There are many example of the distance of the CIB from the government and the state as a whole. We have already seen how wide is the gap between the Minister of Primary Industry and the CIB. In 1979 the CIB was able to refuse to consider appointing a representative to the Board of the National Plantation Management Agency - another state branch. (Papua New Guinea Coffee Industry Board 1979:30)

34. The average will be calculated according to the following formula. Each relevant years average price is to be multiplied by 100 and divided by the relevant figure from the index of Papua New Guinea import prices as published by the Bureau of Statistics if available or the World Banks index of international inflation. The result of these ten calculations are to be added up and divided by ten to give the average. The long term average price should be recalculated in January of each year or as soon afterwards as the information required for recalculation is available. (Papua New Guinea Coffee Industry Board 1980: Appendix C)
35. Some idea of the scale of the potential increase in coffee acreage which the 20 hectare 'intermediate' plantation development represented can be gained from figures provided by Densley which show there was approximately 32,000 hectares nationally under coffee in both Highlands Arabica and coastal Robusta coffee. If the 94 projected 20 hectare intermediate plantations in Eastern Highlands went ahead then this could add about 6% to the stock of national coffee land from this one province alone. The share of increased acreage under coffee which 20 hectares would provide again from this one province—can be judged from the fact that in 1978 Chan anticipated an increase of 2,900 hectares nationally for 'intermediate' coffee plantations out of a total national increase of coffee acreage of 13,500 hectares over and above replacement plantings by 1982 (Chan 1978). This figure included a targeted increase of 1,300 hectares for all production units in Eastern Highlands Province. (Ameri 1982). But by 1982, if the 74 blocks in Eastern Highlands went ahead then the increase in area under coffee (some 1,480 hectares) would have exceeded the Eastern Highlands target for intermediate plantations in its first years of operation. The National government's coffee policy guidelines of 1978 also targeted a coffee production figure of 60,000 tonnes by 1986 (Wheeler 1979). This was a targeted increase of some 10,202 tonnes over the 1976/77 export figure from PNG (almost all PNG coffee is exported) of 49,798 tonnes (Densley n.d.:26). But if by 1986 the 74 twenty hectare 'intermediate' holdings in Eastern Highlands went ahead and were producing at maximum plantation yield by 1986 they would produce 2,960 tonnes which would be 30% the targeted national increase in coffee production from this one province.

36. A business-group is a corporate-like entity which can sue and be sued, buy and sell etc. but with the difference that the internal functioning of a business group is based on the customary law of its members. (Independent State of papua New Guinea, Chapter No. 144. Business Groups Incorporation Act).
37. From July 1967 to December 1977 130 loans were approved for coffee development, a total of K1,138,600. By 1980 however 76 loans were approved for coffee development (almost half the number in one year of the previous ten year total) worth K3,398,600 (almost three times the ten-year total of loans given to the industry in one year). (Papua New Guinea Development Bank. Annual Reports and Financial Statements)

38. Wheeler's budget does establish that 20 hectare projects will be profitable but this is not enough to make the projects attractive to commercial banks. Commercial banks assess projects not only in terms of their profitability but also in terms of the length of time it takes to recoup capital outlay. Ian Afflick noted that commercial bank lending to 20 hectare projects is untenable because

... of the obvious risks involved (and) ... because the time for getting the banks' money back is so long it reduces our cash flow from which we are obliged to lend. (Afflick in M.A.H.B. Walter, 'What do we do about Plantations?' 1981:89)

But for the PNGDB its cash flow is somewhat assured by international agencies this is not such a problem.

39. Fertiliser is required as soon as coffee is planted, in Year 2, at a cost of K3640 which averages out to K6760 by year 8. Seedlings are also a cost to the project in the establishment phase though Wheeler assumed these would be provided free by the CIB-funded nurseries at the government research station at Aiyura or that nurseries would be established on the projects themselves for the provisions of seedlings. Wheeler costed seedlings at 5 toea each in the event that they had to be purchased. Fertiliser application rates are based upon Aiyura recommendations

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2</td>
<td>0.7 tonne/hectare</td>
</tr>
<tr>
<td>Year 3</td>
<td>0.8 tonne/hectare</td>
</tr>
<tr>
<td>Year 4</td>
<td>1.1 tonne/hectare</td>
</tr>
<tr>
<td>Year 5</td>
<td>1.3 tonne/hectare</td>
</tr>
</tbody>
</table>
40. The empirical work upon which this section is based contains a small number of in-depth interviews on 10 projects (27% of the projects producing coffee in 1982), thirty-eight personal interviews undertaken in national DPI, PNGDB, Department of Lands, The Department of Business Development, The Coffee Industry Board, the National Plantation Management Agency, Gouna, ANGCO and with business group members and leaders and a study of files on blocks at various stages of development in PNGDB (Goroka Branch).

41. Briefly, the background to the sectoral funds programme is that large amounts of money (total for 1980 was K10 million and for 1981 almost K13 million) were to be allocated through a formula designed and to be implemented by the NPO (National Planning Office). The money was intended to be used to redress the inequalities between provinces on national functions such as education, agriculture, transport. Behind the design of the sectoral programmes was the realisation in Port Moresby that new and poor provinces were not able to put together adequate submissions for funds allocated through the NPEP process and hence were failing to compete for funds with the rich provinces and the national departments. Rather than change the rules of the NPEP, the NPO designed the sectorial programme. The sectoral funds in transport and agriculture were redirected however by the Deputy Prime Minister, Mr Okuk, who, contrary to the plans of the NPO, gained cabinet approval for the funds to be disbursed personally through the offices of national parliamentarians.

42. The management agencies became involved in the blocks from the beginning, many seeking out clan groups and proposing that they consider establishing 20 hectare projects. The management agencies undertake no risk at any stage of this process and they stand to be rewarded for their efforts even in the pre-loan stage as a result of the award of government subsidies to management agencies to encourage them to explore the possibility of establishing 20 hectare projects. Many management agencies carry out the project investigation stage in place of DPI and it is arguable that they are more skilled
to carry out this investigation. The management agencies oversee business group registration also. The land investigation stage is still undertaken by Kiaps because this work is highly specialised and time consuming. Management agencies would begin to suffer financially if they were to undertake the endless interviews of customary land owners needed to ensure that the customary land owners who claim to have use rights over the land really do have these rights. This is one stage where the management agency accedes control to the state. However, the management agency usually supervised the ‘sweat equity’ stage of the development, the establishment of a nursery on the block (if the management agency approves of this) and the planting out of the block. The management agency also draws up the budget for the block and make applications for funds which when received are channelled through the management agency.

43. Unfortunately I was not able to get access to original budgets of Gouna managed projects.

44. Indeed, it is very difficult to work out from the Arusafa budget how the project will ever pay out its loan.

My calculations show the following:

<table>
<thead>
<tr>
<th>Year</th>
<th>Income (calculated at K1350/tonne green bean equivalent)</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>31,433</td>
</tr>
<tr>
<td>2</td>
<td>4,860</td>
<td>26,806</td>
</tr>
<tr>
<td>3</td>
<td>24,705</td>
<td>38,149</td>
</tr>
<tr>
<td>4</td>
<td>49,545</td>
<td>49,776</td>
</tr>
<tr>
<td>5</td>
<td>61,965</td>
<td>62,165</td>
</tr>
<tr>
<td>6</td>
<td>61,965</td>
<td>61,885</td>
</tr>
<tr>
<td>7</td>
<td>61,965</td>
<td>65,996</td>
</tr>
<tr>
<td>8</td>
<td>61,965</td>
<td>66,000</td>
</tr>
</tbody>
</table>

45. Quarterly advance requests are always late from Gouna and often from NPMA. Management agencies are supposed to submit two copies to us in Goroka one of which we send immediately
to headquarters in Moresby. But Gouna never submit a second copy, they say it is too expensive, this is just an excuse. Their lateness and their refusal to cooperate causes delays, for headquarters will not release any money until they get our reports from Goroka. (Lim Efemo, Interview, 15/6/82)

46. It is Development Bank policy not to give money back to the clansmen. The Development Bank is not keen to let money go back to the people. If the people want more money then the Agency and the bank will say no. (Keith Schirmer, Interview, 8/6/82).

47. Both Bill Lloyd of Angco and John Leahy of Gouna defended the decision to not budget for a 'wet' processing plant on the block because it would be expensive and it would lead to a deterioration in quality. Wheeler budgetted for a capital cost of a 'wet' processing plant of K6000 but by 1982 the cost of a wet processing plant from P.S.S., Goroka, the local agents for Bentall, was K15,000. This plant included a pulping machine, fermenting vats, coffee pump, flotation tanks but did not include drying tables and storage sheds. This is a considerable capital outlay. Can a block afford this capital outlay? Is it in fact more economical to simply take cherry off? I show in this section that a 'wet' processing plant at K15,000 is viable given the amount blocks are paying their tied processors to process cherry to green bean. Prices used are for green bean equivalent. We must also remember that full production on a coffee plantation does not occur until year 7. The first point to note is that in ANGCO’s proposed budgets submitted in the period 1980 - 1984 the blocks were charged K150 per tonne green bean to process cherry to green bean. Goroka Coffee Pty Ltd were charging K90 per tonne green bean equivalent to process parchment to green bean. This means Goroka Coffee Pty Ltd were charging each block K60 per tonne green bean equivalent to process its coffee from cherry to parchment. Would it be possible to finance the purchase of a 'wet' processing factory if this K60 were being used not to go into the
coffers of Goroka Coffee Pty Ltd but to pay off a 'wet' processing factory? How long would it take to pay off the factory?

We can calculate the expected yields on the 20 hectare block using DPI’s conservative yield figures from Year 4. On 20 hectare blocks DPI expects:

- Year 4 - 14 tonnes/green bean
- Year 5 - 25 tonnes/green bean
- Year 6 - 38 tonnes/green bean
- Year 7 - 50 tonnes/green bean

Year 7 is the year of full production so it can be expected that 50 tonnes/green bean will be produced on a 20 hectare block in each successive year. Taking Year 4-7, the total production of green bean for these years equals 127 tonnes. If K60 tonne/green bean was saved on each of these tonnes by processing the crop to parchment stage some K7620 could be paid off on the cost of the 'wet' processing plant by the end of Year 7. After year 7 some K3000 per year (60 tonnes x K60) could be paid off each year. By Year 10 a total of K16,620 could be paid on the initial capital cost of K15,000. We could add another couple of years to this repayment schedule for interest charges but it is feasible to argue that by year 12 a twenty hectare block could pay off a K15,000 wet factory solely from the savings made in not having to pay contract processing for the cherry to parchment stage. If we remember that by Year 12, the 'wet' factory has only been in operation for seven years then the repayment schedule is a very attractive one. Depreciation has not been taken into account and this would be a high cost in the early years of the establishment of a 'wet' processing factory but the equipment has a very long life so that depreciation would be negligible over time. Transport costs on the block should actually be reduced by taking off parchment rather than cherry because cherry is bulky and expensive to transport. No allowance is made for the extra cost of labour required to carry out the processing and it is likely that this would add a couple more years to the loan repayment schedule. Nevertheless, these calculations suggest that wet processing
on the block is not 'too expensive' nor too high in capital outlay. It is unlikely that quality would suffer if equipment such as this were used. The 'quality' argument usually applies only to village processing whereas a wet factory of the type under consideration would be a professional operation. Finally, there is another good reason for 'wet' processing on the block and one which management agencies may have to consider more seriously as more of their blocks come into production. This is that cherry is very easily stolen. Parchment can be kept under lock and key and records kept but cherry on the tree is very vulnerable to theft.

48. Gouna for example employs a team of specialist pruners who move from Gouna's large plantations to its 20 hectare managed blocks and adopt exactly the same pruning methods on the block. Specialisation means the job can be done at a more rapid rate than it could be done by the ordinary labourers on the block. Specialist fertiliser teams from Gouna's larger plantations could also apply fertiliser on the blocks and we have already seen how Gouna trucks take cherry from the blocks to a Gouna factory for processing. This emphasis on proper business practice sounds sensible but it has its limits in an industry like the coffee industry. The main limitation is that the new and better machinery can not be applied to most of the stages of coffee processing such as harvesting for fear of damaging the crop. Specialist skills are also limited because not many of the operations on a coffee plantation are complex. However, once specialist teams are brought in on a contract basis there is a need for even closer management coordination. This is the difficulty Gouna has got itself into. John Leahy, Gouna's Coffee Development manager - has to be closely involved in the personal supervision of each block to make sure the specialist teams and the circulation of assistant managers does not break the continuity of block development. In 1982 Leahy was able to bring only two blocks a year into the Gouna organisation because of the finite limits to his own personal supervision. Andes Berquist said also:
We can't get many more blocks. Next year we won't take any more. At the moment we are making extensive use of our own employees. If we wish to expand we will have to rethink. We can not just take on more blocks in a similar position. We are in a wait and see period as a corporation. (Andes Berquist, Interview 10/06/82)

49. Rex Naug said, '... there is no feeling within NPMA that the coordinating function will not be needed (and) ... the future of NPMA is closely tied to the blocks for most of our own plantations are almost ready to depart from us. (Rex Naug, Interview 7/6/82)
CONCLUSION

THE COFFEE INDUSTRY IN PAPUA NEW GUINEA

The aim of the dialectic of underdevelopment theory that has been developed in the thesis is to demonstrate how the complex interweaving of imperialism, class and state causes underdevelopment and exploitation in the industry. This requires the coffee industry of Papua New Guinea to be analysed in terms of class locations in the industry, class relations and the form and function of the state. I will now summarise the findings for the coffee industry of Papua New Guinea.

The study of class location has demonstrated that the enduring social structure in an industry arises out of production. In the colonial coffee industry of Papua New Guinea the two main classes in the industry were the white planters and the smallholders. The study of class location exposed many important features of the hidden abode of production of these two main classes. The significance of the size of the unit of production, of the different forms of labour used on different production units - wage labour on plantations, family labour on smallholdings - the capacity of planters for investment and accumulation and the need of smallholders to balance food production, food purchases and commodity production within the household were all surveyed and their importance for the organisation of production was shown. But most importantly, it was shown that for both units of production there were severe limits on their development at the level of production. Coffee planters are limited by the production of absolute surplus value. Smallholders are limited by the simple reproduction 'squeeze' which at the level of production takes the form of the intensification of labour devoted to coffee vis-a-vis food and at the level of exchange takes the form of declining terms of trade for the household. The limits to the development of smallholders and planters are not altered with independence even though white plantations were taken over by two black class fractions, the petty bourgeoisie and the big peasantry.
The limits on development of the main producing classes and their distinctive class locations determines the course development and underdevelopment takes beyond the production level. The fundamental fact is that antagonistic classes are in different forms of production. Planters cannot directly exploit the subordinate class in the industry, the smallholders, at the point of production as they can wage labour. Surplus (not surplus value) has to be appropriated by the dominant class by extracting land or labour from the household, by appropriating surplus in the form of monies or other assets of the household and by monopolising the marketing outlets for the smallholder crop or in other ways turning the domestic terms of trade against the smallholder producer. Class struggle in such circumstances is indirect. This further limits the self-expansion of the dominant class. The surplus of the smallholder also is appropriated without the smallholder unit of production being transformed in the process. It is important to recognise that the limits on self-expansion of planters and their need to appropriate surplus outside the level of production is a structural feature of the production of coffee. It would occur whether plantations were owned by blacks or whites or were nationalised.

The regulatory type and form of international capital as embodied in the ICO discriminates against small coffee-producing countries like Papua New Guinea. This discrimination operates in two main ways. First, it freezes quota shares on an historical basis, providing advantage to the bilateral alliances of big importers and big exporters which dominate the agreement. Big exporters are assured of their market share and since 1976 big importers have been assured of supply. Second, the agreement coopts small producer states to police the operation of the agreement. This can be expensive and carry obligations which are not in the interest of large producers in the coopted state. An obligation on this type can be found in the stockholding provisions of the 1976 Agreement.

An important feature of the regulatory form and type of international coffee capital is that it is politically indeterminate, i.e., the control of marketing and regulation
which exists at the international level does not have to be replicated in the domestic market of the member country. This is just as well, for no member country would tolerate ICO interference of its sovereignty. Also, the domestic marketing arrangements in a coffee-producing country are usually a product of that country's history. Hence marketing arrangements differ from country to country.

It has been shown in the thesis that the market for the coffee industry in Papua New Guinea, both in the colonial and the post-colonial periods, has not been marked by significant government intervention. This fact does not mean that the domestic coffee market in Papua New Guinea is free or competitive. But it does mean that dominant classes, at the level of class relations (objective), have to rely more on market power than on state power if they are to exercise significant control over the flow of coffee in the domestic market. This control was achieved by white planters when they set up the industry and was inherited and extended in the post-colonial period by the petty bourgeoisie and the big peasantry. The strategy adopted by the dominant classes has been to become vertically integrated (from coffee buyer to exporter) in the coffee industry and to buy and sell plant and equipment so that they can control each pinch point in the industry. A pinch point in a commodity chain is a bottle neck through which raw material must pass on its way to becoming a saleable item.

In the Arabica coffee industry in Papua New Guinea I have identified three main pinch points: the coffee buyer pinch point, the processing (from parchment to green bean) pinch point and the exporter pinch point. Pinch points have crucial social significance as class boundary outposts because they represent points in the commodity chain at which surplus is most easily appropriated from subordinate classes. I have shown how surplus is appropriated from smallholders at the coffee buyer pinch point when processor-tied buyers pay smallholders the price of low-quality parchment without testing it for quality. I have argued that in the processing and exporting of coffee bought from coffee buyers there is nothing to prevent its being graded at the
higher quality level. Surplus is also appropriated from the smallholder at the processing pinch point. This is an indirect result of restricting the number of processing plants. I have shown that the argument that overcapacity exists at the processing pinch point is a fiction. But the fact that the number of processing plants is restricted assists processors to tie smallholder production to particular factories. In the 20 hectare case study I have shown how processors tied smallholder production of cherry to processing firms owned and operated by the management agencies. Also, many processing plants and exporters are vertically integrated. This further reduces competition in the industry and increases the power of the dominant class in the coffee industry. At the exporter level surplus is mainly appropriated through the operation of the stabilisation fund. This occurs less as a result of the extraction of a levy from growers to finance the fund than from the fact that when a bounty is paid back to the industry at a time of low prices, it is paid back to exporters. Few in the industry seriously believe that the bounty reaches the smallholder by this process.

Class relations in the coffee industry of Papua New Guinea are vitally affected by the form and function of the state in that industry. The role of the state in the colonial and post-colonial coffee industry in Papua New Guinea presents, at first, a not unfamiliar paradox. On the one hand, the state appears to be an instrument in the hands of the dominant class. For example, the Department of Agriculture, Stock and Fisheries (DASF) did assist well-off farmers in its early extension period and the Coffee Marketing Board (CMB) did assist the white planters to coopt a budding middle peasantry into the coffee industry. There are enough examples of this kind throughout the thesis to suggest that both the colonial and the post-colonial state in the coffee industry reinforced existing class locations and appropriation of surplus at the various pinch points. However, there are also enough counter-examples in the thesis to show that the state in the coffee industry was not an instrument in the hands of either the petty bourgeoisie or the big peasants in the contemporary period. For example, in the colonial period
DASF did not use the full coercive power of the state to prevent smallholders from planting coffee as the planters requested and in the post-colonial period the Department of Primary Industry (DPI) has been virtually ignored by the dominant classes in the industry.

How can the form and function of such a state be explained? I have called the state form in the coffee industry of Papua New Guinea a Bonapartist state. Bonapartist states are neither instruments in the hands of dominant classes nor masters over all social actors. The Bonapartist form of state highlights the fact that state action takes place within a system of social action. State policies are always subject to modification by class struggle and may even become irrelevant in this process. In the coffee industry of Papua New Guinea the state's specialist agricultural branches, DASF in the colonial period and DPI in the post-colonial period, played a minor role in the coffee industry. There is a huge gap between what these branches of the state claim as their own achievements and what are in fact the outcomes of social action. For example, I assess the claim that DASF assistance was vital for the growth of the coffee industry and find it to be exaggerated. I also analyse the 20 hectare development in the post-colonial period and show that DPI was unable to play the coordinating role it had set itself. I analyse the politics of setting up the Coffee Marketing Board (CMB) and its post-colonial predecessor, the Coffee Industry Board (CIB), as examples of the way in which Bonapartist state forms became established. I show that setting up these boards was a political process which involved recognition of the limits of the state in shaping regulatory functions. These regulatory functions do not include state marketing because this would compromise the market power of the dominant classes but they do include the establishment of a range of protective devices for the industry as a whole, such as the stabilisation fund.

The function of the state cannot be discovered through policy analysis focussed on state action alone but must be understood in terms of the structure and role of the state in a class-divided society. I have applied two analytical tools, functional
autonomy and political penetration, to analyse the function of the state. I have shown that the Bonapartist state in the Papua New Guinea coffee industry has high functional autonomy and low political penetration. This functional mix may have both advantages and disadvantages for the dominant classes in the industry. In the 20 hectare case study I have shown, for example, that such a functional mix was an advantage to the dominant classes in the industry. The high functional autonomy in the state allowed dominant classes as management agencies to gain representation in various branches of the state without the state being able to penetrate, and therefore control development at the block level. Thus it could not regulate the role of the management agencies. However, this functional mix could become a disadvantage to the dominant classes in the industry in other ways. The dominant class fractions are restrained by a range of technocratic devices beyond their control which restrict the penetration of dominant classes into households. The struggle by dominant class fractions to capture, control, or destroy these technocratic devices – and thus alter the functional mix of the state in the industry – could become a feature of coffee politics in the future.

The final section deals with class relations (subjective), which is the real moment of class struggle because this is the moment of boundary struggles when classes are trying to shift boundaries in their favour and therefore to roll back the space of other classes and fractions. In the post-colonial period I have analysed a new coffee development program, the 20 hectare development, under this heading. The study shows how the analytical tools from the 'dialectic of underdevelopment' can be applied to a new policy area. The conclusion of the study is that smallholders have voluntarily handed over land and labour to dominant classes in their guise as management agencies. The smallholders may not have lost their land forever and the 20 hectare development may not fail but the point is that only luck, in the form of high international coffee prices, can save smallholders from becoming completely dependent on management agency use of 20 hectare land. The study shows conclusively how the best intentions of state policy makers to help smallholders
develop can not be realised in a Bonapartist state with high functional autonomy and low political penetration, where dominant classes have control over pinch points in the marketing chain.

THEORETICAL PROBLEMS RESOLVED AND REMAINING IN THE STUDY OF THE DEVELOPMENT OF CAPITALISM

It should be obvious from the way in which conclusions are drawn in the study of the coffee industry in Papua New Guinea, and indeed from the way the thesis is structured, that much emphasis is placed on the theoretical contribution of the research. Some important theoretical concepts are developed in the thesis so it is appropriate to conclude with an assessment of the adequacy of these concepts as tools of analysis. I focus here on the theoretical adequacy of imperialism, class and state as these are used in the thesis by discussing which theoretical departures worked well and which require further work.

What at first appears as a significant blow to theories of imperialism, the argument that imperialism is politically indeterminant in the periphery, is in fact not quite so major. Indeed, the idea of a metropolis-satellite chain of exploitation extending from the corporate boardrooms in the metropole, through the comprador politicians in the periphery to the down-trodden is not only exaggerated but, in its Wallerstein (1979) version of unequal trade, is not even properly demonstrated. International capital, I argue, is not well enough coordinated to determine the political shape of one country, let alone an entire world system.

The alternative offered in this thesis is a less comprehensive view of imperialism. The focus is shifted from the political determinancy of imperialism to its political indeterminancy in the periphery. Instead of assuming that imperialism shapes the periphery at the level of the state as a whole, the effect of imperialism must be demonstrated concretely in terms of its impact on production and politics in the periphery. In the coffee industry I have shown that the form and type of international coffee capital does limit production possibilities inside the periphery, does coopt the domestic state, and does
cause crises in domestic coffee industries, but the form and type of international coffee capital has not determined the nature of the domestic class struggle or the role of the state in the coffee industry.

Where does this leave the study of imperialism? It does not advance the study of imperialism in theoretical terms except to weight the argument in favour of those theories of imperialism which stress that imperialism is a theory of global capitalist accumulation. The alternative view, that imperialism is a theory of global political organisation, is given little credence for it is likely that the political power of most global actors in most circumstances is neither greater nor less than that of other political forces in the periphery. Empirically, the way to proceed to analyse the political effect of imperialism on the periphery would be to measure the effect of the form and type of international capital in the peripheral country on an industry-by-industry basis. However, in theoretical terms there seems to be no way known by which these political effects could be aggregated to show the precise political effect imperialism has on the periphery. Perhaps this problem cannot be resolved. After all, while Marx was right that capitalism has created a world market, international capitalism has not created a global state and until it does its political effect on the periphery may remain indeterminant overall.

The basic Marxist tenet, that social actors are located in production, is shown to be accurate and fundamental to social analysis. It is at the level of production that social analysis begins and it is through production that social classes reproduce themselves. It is important to be theoretically rigid on this point. Many social actors can appear important at a particular historical moment - rich people, celebrities, speculators, poets - but they cannot reproduce themselves through production. Such people are unimportant in the process of social change unless they also have a base in production or represent classes that do. The technocrats who build technical devices like the stabilisation fund in the coffee industry are identified as a social category and not a class because they have no base in
production. The technocrats were powerful and very influential at the time of independence and they have left behind them a legacy which continues to shape post-colonial politics in Papua New Guinea. But their handiwork does not represent the interests of any class in Papua New Guinea and will probably be undone in time. Too often class location is not studied because it is thought that unless class location translates into conscious class political action then class location is unimportant. This is a mistaken view. If such an approach to smallholders had been adopted in the study of the Papua New Guinea coffee industry then a great deal of the action (or non-action) would have been missing. Smallholder class action may be silent and indirect but, as is shown in the colonial chapter, they transformed the nature of the industry through 'silent' class struggle when they refused to stop planting coffee.

Some theoretical departures are made in the class relations (objective) section with the development and use of the pinch point concept. The concept was discovered as a direct result of the commodity chain methodology adopted. For the critical social scientist the concept of pinch point in the marketing chain is an advance on the economist's focus upon market price and distoration of market price. The problem with the economist's approach is twofold. First, it tends to downplay the importance of control in the market when the price is not distorted. Second, it does not connect market exchange with production or, more particularly, price with surplus value. The pinch point approach does overcome the first problem. The orthodox economist's account of the operation of the market is satisfying in critical terms in cases where the price paid for labour or a commodity is artifically raised and is out of line with market rewards to the factors of production. But when the price paid for labour or the commodity is in line with market demand for these factors of production then the whole idea of appropriation of surplus disappears from the economist's account. The pinch point analysis demands that attention be paid to control and appropriation even in cases where price is not distorted. The pinch point analysis highlights the fact that social actors who control pinch points benefit not only from the value added to the
product during, say, processing, but they also have a more secure position in an industry than do the subordinate classes. The vertical integration of the dominant class through control of pinch points and the vulnerability of the subordinate classes to appropriation of surplus and price fluctuations means that inequality can be heightened by the operation of the market regardless of price considerations.

The pinch point analysis does not shed any light on the connection of price and surplus value, the transformation problem as it is called. For this reason, the idea of pinch points is more of an empirical tool than a theoretical one. But until the connection between price and value can be understood in empirical terms — that is, until it can be known empirically how to demonstrate the velocity of price change with the rate of surplus value — then an approach that emphasises control in the market, as the pinch point approach does, is useful.

The pinch point concept is limited because it is concerned merely with power and control in the market and not with the dynamics of production and exchange in market relations. But the pinch point analysis does highlight the fact that the market is not epiphenomenonal, as some Marxists have imagined. The market is in fact at the centre of social relations. It is a major arena for domination and control of subordinate classes. More analysis is needed to develop the pinch point concept but its special advantage for critical social science is that it can be applied to every commodity in every industry which undergoes a process of transformation from raw material to finished product.

The role of the state has been analysed in one industry only. This represents a limited testing of the theory outlined in Chapter 1. The theory is based on the idea of a differentiated state, a state that could adopt different forms in relation to disarticulated sectors and industries which contain their own class struggles. It has, however, been shown that the starting point for analysing the differentiated state lies in identifying the form and function of the state. In the case of the coffee industry in Papua New Guinea, the state has been shown to be
Bonapartist in form. The concept of Bonapartism is of course derived from Marx’s empirical writings on the regime of Louis Napoleon. Marx did not lay down general theoretical guidelines for its use in other areas at other times. I have taken the Bonapartist state to mean a state transcendent over classes, neither their instrument nor their master. If my use of the term Bonapartism lacks neat theoretical precision, so does the original. As Marx himself wrote of the success of Louis Napoleon

Thus it happened, ....that the simplest man in France acquired a significance of the most multifarious kind. Precisely because he was nothing he was able to signify everything except what in fact he was. (Marx 1973: 72)

Bonapartist states find bases of support in dominant and even subordinate class fractions. They divide and rule classes which is why Bonapartist states are probably the ideal form of the colonial state. In many colonial regimes such as Tanzania they coopted fractions of subordinate classes such as chiefs, while in others like Papua New Guinea they performed balancing acts between divided dominant classes such as the metropolitan bourgeoisie and planters. In other colonial regimes, such as Kenya, the Bonapartist state may not have existed at all. The concept has great explanatory utility but it is also clear that it suffers from its empirical heritage. This may be true of the analysis of other forms of state such as the partisan and liberal form. More work is needed to develop a theoretical understanding of the various forms of the capitalist state.

The function of the state has been elaborated in the study. The value of the concepts functional autonomy and political penetration lies in the fact that they describe at once the empirical reality of the way in which a state is structured, as well as the linkage between the state structure and social actors and class struggle. Capitalist states really do differ in the degree to which their separate centralising branches are functionally autonomous within the state and in the depth of their political penetration. For too long these structural aspects and their influence upon the function of the state have been taken for granted by critical thinkers. There are
weaknesses, however, in the analysis of the function of the state which has been presented. For example, how effective would these concepts be in analysing a state where functional autonomy is minimal and political penetration is great? In other words, can the analysis of the function of the state as I have presented it deal with a partisan state where the centralised state simply dominates? In a partisan state the actual meaning given by citizens to the functional mix of the state might be as important as the way in which the state actually functions. In such a case, it may be necessary to develop the ideological dimension of the form and function of the state in a more detailed way than has been presented here.

Capitalist societies are class divided. Dominant classes and states exploit the weak. These are easy statements to make but, as the thesis shows, the process is a subtle one and the demonstration of the truth of these statements is complex. Many actors in the coffee industry do not consider class exploitation to be a fundamental feature of the industry. They can explain new developments in the industry, failures of planning, etc., without recourse to explanations based on class and exploitation. But the task of critical social science is to unmask, to liberate, from habitual norms and dogmatic, everyday experience. I have proceeded to unmask everyday beliefs concerning how the coffee industry operates. I have also exposed some weaknesses in the theory of underdevelopment. I have in the process unmasked many everyday radical solutions of how to overcome underdevelopment.

The study of the coffee industry in Papua New Guinea gives no comfort to those who see socialism and self-reliance as a solution for underdevelopment. The call for self-reliance is only partly applicable to international coffee relations. The ICO does discriminate against small producing countries but the principal agents in this discrimination are fellow producers and the country's own state. How can self reliance improve this situation? Inside Papua New Guinea the idea of a coffee industry organised on socialist lines is entirely fanciful. Who would be the agents of such a change? Smallholders are not communalists;
they are peasants. They are not directly exploited, so they have no basis for conscious, mobilised class action in support of socialism. Also, the capitalist state proves to be a most subtle form of power. Its agents are capable themselves of advocating socialism while at the same time simply extending the system of appropriation. Because of the complexity of the analytical task, let alone the liberating task, I have not been able to suggest in this thesis how the slogans of self-reliance and socialism can be replaced with any concrete mobilisation strategy. There is still much theoretical work to be done before any such strategy materialises. However, the thesis does endorse the call for the 'defence of peasant political space', as Holmquist (1980) put it some years ago, and it shows that this defensive task is urgent in peasant societies.
Modernisation Theory

Recent writings by Townsend (1982), and Goldsworthy (1983) and dog-eared copies of David Apter on a Professor's desk at the University of Dar-es-Salaam suggest that modernisation theory is not going to disappear without a struggle (Samoff 1982:106). In the context of a search for the specificity of the political perhaps this is just as well. The modernisers were pre-eminent political theorists, the members of the CCPSSRC setting themselves no less a task than preparing the ground for a unified theory of politics (Goulbourne 1979:20). If it were not for the fact that modernisation theory is built upon a base which explicitly and implicitly supports capitalist development (Alavi 1982:289) and hence makes anything they touched illegitimate in radical eyes, much could be gleaned from the modernisers' study of politics.

Of course they had no theory of the state, and did not examine the 'political system' in the context of a class divided society, but rather saw it as a separate sub-system standing outside and above society, an autonomous agency invested (potentially) with an independent source of rationality and capable of acting in the interests of the whole of society (Alavi 1982:289). But neither did they make the mistake of treating the political system as an undifferentiated entity. Indeed, differentiation plays a major role in their approach. They adopted a functionalist approach which begins with the assumption that the main system and its sub-systems at any one time are at equilibrium. As a qualitatively original phenomena is introduced in a particular sub-system the input/output relations this system has with other sub-systems is affected. This results in a change in the main system as it moves from one equilibrium to another. As this movement takes place, new roles and new tasks are created which must be filled. As change occurs more frequently, more complex roles and tasks need to be filled at both main system and sub-system levels. This process is known as differentiation and
is regarded by political developmentalists as the key outcome of modernisation, i.e., the progressive structural differentiation of system and sub-system.

However, because the modernisers were behaviouralists and therefore in revolt against legal formalism, differentiation in their work takes the form not of functional differentiation based on the phenomenal forms of the state apparatus, the institutions themselves, but took the form of differentiation based on the generalised functions all political systems must perform. The scheme is well known. The input functions are four: 1) political socialisation and recruitment; 2) interest articulation, the role played by associational groups; 3) interest aggregation, the role played by political parties; and 4) political communication. The output functions are three: 1) rule making, the role of the legislature; 2) rule application, the administration; and 3) rule adjudication, the judiciary. What is objectionable about this scheme is not that it is functionalist, but that it is ethnocentric (Bernstein 1971/72). Almond and Coleman clearly stated,

the problem essentially was to ask a series of questions based on the distinctive political activities existing in Western complex systems. In other words, we derived our functional categories from the political system in which structural specialisation and functional differentiation have taken place to the greatest extent. (Almond and Coleman 1960:16)

Explicitly or tacitly their framework was based upon the assumption that in order for development to take place it was necessary for the countries of the Third World to simply imitate the historical processes of the advanced industrial West. All modernisers agreed that the central problem was for developing countries to overcome the problems of dualism (a traditional and a modern sector) but different modernisers emphasised different paths to modernity. Lerner emphasised the modernising effect of the diffusion of cultural values, Rostow advocated the diffusion of western capital and technology, while the CCPSSRC emphasised the modernising effect of the diffusion of western political values (Higgott 1978). All modernisers held, however, a linear concept of development based on a notion of stages from the
traditional to the modern. The main criticism of stage theories is that they are essentially teleological (Tilly 1975:17). The modern–traditional dichotomy suggested that modern was good and traditional was bad, and linear assumptions encouraged political developmentalists to emphasise ends rather than means. Political developmentalists had an acute sympathy for the leaders of the new states (Sandbrook 1975/76:179) and were often led by their theoretical assumptions to de-emphasise the excesses of modernising governments and the military (Kesselman 1973:144).

In assuming that developing countries had only to imitate the West they were assuming not only that the internal conditions of the new states did not differ markedly from those which existed historically in the West, but also that the international context was comparable. This last assumption was clearly false. The colonial states were themselves products of an international system in which some states were strong enough and mobile enough to conquer and govern territories and people. Clearly, the development of the new states even after independence could be encouraged or restrained by the great powers. Economically, also, the world had changed greatly since the Western countries had begun to develop. Initial starting points were different. The new states found themselves in a fiercely competitive international market where some countries had a powerful head start in industrialisation and technological development. The new states were unable to expand into peripheral territories in search of new resources as Tilly, Rokkan and Emerson (Tilly 1975) show the developing Western countries could do, and this also imposed limits not experienced by the West when it developed.

The failure to incorporate an external dimension in their work is not a mere oversight but a direct result of the modernisers' theoretical framework. Almond and Coleman did not totally ignore the international dimension but, as Tilly notes, there seems to be something specific about their analysis of political development which appears to have blocked the effective introduction of the pooper international variables into existing developmental models (Tilly 1975:620). The 'specific something'
that makes the theory untenable is the boundary problem. It is a serious theoretical lacuna in modernisation at both the domestic and the international levels.

At the domestic level, the problem arises from the modernisers' basic claim that the political sub-system has its own specificity. This is a claim that the analyst can and indeed must demarcate the boundaries between the political and other sub-systems, e.g., the cultural and economic sub-systems. Such demarcation was possible for Western systems where the analysts simply identified organised interests (associational groups) which were structured and obviously functioned in relation to the political, economic or cultural sub-system. In the context of developing countries, however, the developmentalists' own empirical work tended to suggest that the existence of a distinct political system was very hard to establish by the boundary approach. The political boundaries proved difficult to locate. Coleman's account of politics in sub-Saharan Africa concludes that 'it is difficult even to conceptualise a 'political system' at the territorial level' (Coleman 1960:333). He finds that many aspects of the political system to be indeterminate. Boundaries are in flux between modern and traditional political systems because most Africans still have interests in both worlds and because interests are not functional but based on race, tribe and nationality which are still the most decisive factors in contemporary African politics (Coleman 1960:318).

At the international level, the modernisers also used boundaries between one unit of analysis and another as their key analytical tool. They considered it plausible to take the territorial entity as their unit and to compare systems and sub-systems within it with those inside other territorial entities. But they were obsessed with the boundary problem. They identified a key question for new states to be whether colonial boundaries were adequate and would survive independence or whether they should be changed, and if so on what basis ought they to be re-established. This led to the vacuous study of nation building. Nation was a word that could not be defined and a concept that was drawn directly from the European experience which itself was far from
unambiguous. Studies of nation building were heavily tautological and often absurd and in any case the Third World experience seemed to be disproving in practice the necessity of a connection between state and nation.

Generally, the colonial boundaries held despite the national heterogeneity of many new states. Hintze long ago reminded us that the structure and form of a state depends at least as much on the conditions of its external power position as on the social structural conditions of its internal process (Hintze 1973:156) and it is very likely that these external factors were crucial for boundary maintenance by most new states. These states did, after all, take their place in an international system of states, which, as Tilly (1975) notes, have since 1648 been acknowledging and to some extent guaranteeing each others existence. This process was applied to the new states after decolonisation. There were also economic interests which were determined that the colonial states would become viable independent states. Colonial connections and the expansion of trade and investment and aid which took place after 1945 was well integrated into a political world dominated by the sovereign state.

The possible structural role played by international political and economic factors in the formation and survival of the new nations created a severe units-of-analysis problem for the political developmentalists. If it were acknowledged that the international factors were more than isolated change agents, then political developmentalists would be unable to contain their systems analysis within the nation state as the unit. The work by Tilly (1975), though firmly in the political developmentalist framework, recognises the utility of the world systems perspective of Wallerstein, but Tilly is unable ultimately to go beyond the nation.

Dependency Theory

In almost direct contrast to the main concerns of modernisation there emerged in the 1960s and 1970s a new body of theory under the general rubric of dependency theory. The dependistas argued
that development in the periphery depended upon the patterns of dominance and dependence among the nations of the capitalist world. External economic factors largely determined the possibility or otherwise of development. As Dos Santos put the argument in its most general form,

by dependence we mean a situation in which the economy of certain countries is conditioned by the development and expansion of another economy ... The relation of interdependence between two or more economies, ... assumes the form of dependence when some countries ... can expand and can be self-sustaining, while other countries ... can do this only as a reflection of that expansion, which can have either a positive or negative effect on their immediate development. (Dos Santos 1970:231)

The analysis was relational: change was understood as being explained in terms of the relations between the centre and the periphery, relations of domination and dependence which were established historically through colonialism or patterns of trade. Dependency analysts generally focus upon the problem of foreign penetration of the peripheral economy. They attempt to show how external economic and political forces affect development in the periphery and how these external factors reinforce dominant classes in the periphery which in turn exploit subordinate classes. Once these general points are made, however, dependency is more notable for the diversity and range of positions within the paradigm on crucial questions such as the class location and class nature of exploitation in the periphery, the generalised class structure in peripheral social formations and the question of whether development is possible or not in the periphery. All of these are problematic within dependency. As Chilcote notes,

it is clear there is no consensus about a theory of dependency. Indeed no common theory exists; the literature on dependency moves in many directions. (Chilcote 1981:297)

In this short review of dependency theory it is not possible to do justice to the full diversity of dependency but the survey needs to cover enough ground to establish two important
criticisms of dependency which are confronted in the course of the thesis. The first criticism is that, despite the concentration in dependency upon external factors, lack of consensus means that the concept of imperialism is poorly analysed and that further work must be done to make more rigorous the precise impact of external factors upon internal development. The second criticism is that attention to external considerations of dependency means that dependency has a very inadequate view of class struggle and particularly of the peripheral state in relation to class struggle (both these criticisms are mentioned in Chilcote 1981:297). The remainder of this chapter elaborates upon the direction a study of imperialism in the periphery should take while the following chapters present a framework for studying class and state in the periphery.

The Diffusionists

In tracing the course and nature of these problems within dependency it helps to follow Chilcote (1981) and begin with the distinction he makes within dependency between a model based on diffusion and one based on dependency proper, i.e., the appropriation of surplus. Each approach has different parentage. The diffusionists build upon the theories of Prebisch and the E.C.L.A. school, while the dependency proper are followers of Paul Baran. The E.C.L.A. school believed that underdevelopment could be linked to both internal and external factors. They argued that there was a clear distinction between the centre and the periphery, for in the periphery the spread of capitalism and especially the use of modern technology was confined by the limits to the modern sector. The limits to the development of the modern sector were imposed where development was based upon foreign domination of an economy, for foreign domination was usually accompanied by the continued existence of traditional or feudal oligarchies. Thus foreign domination of an economy could exacerbate underdevelopment. Modernisation of this type, Furtado (1964) argued, led to dualism.

Sunkel (1972) and Furtado both argued that Latin America should set high tariff barriers and establish national industries to substitute for the increasing demand for products from abroad.
It was believed that import substitution policies would bring about a more locally controlled economy, undermine the traditional ruling classes, and stimulate national development and the emergence of the modern state. The E.C.L.A. school like the modernisers, aimed to promote development which was seen as occurring through the diffusion of modern technology, capital and ideas from the modern to the backward sector. The E.C.L.A. school were thus on the same theoretical terrain as modernisation theory, though they believed the agents of modernism must be a national industrialising bourgeoisie rather than metropolitan capital.

Dependency Proper

Within the dependency stream proper as identified by Chilcote there are at least four different positions. In this chapter, however, I concentrate on the most important, that of the writings of Gunder Frank and his thesis of the development of underdevelopment. Frank’s work is indeed seminal in the field. Most work on underdevelopment since Frank is in some sense a response, usually a very critical one, to his provocative theorising. My aim in this section is to outline Frank’s basic position, noting aspects in Frank’s work crucial to dependency, which I endorse. At the same time I note the serious nature of criticisms of Frank’s position and argue that these criticisms (especially as they bear upon the concepts of imperialism, state and class) must be incorporated into dependency. In the first part, I analyse Frank’s view of imperialism, monopoly capitalism, which I see as one-sided. I argue that Frank was wrong to assume that external forces penetrated the periphery in the sole guise of monopoly capitalism, that monopoly capitalism or indeed any form of monopoly is the sole manner in which production is organised in the periphery, and that monopoly capitalism has the sole form of multinational corporations. The role of international trade and investment capital, especially as these relate to the role of the peripheral state, need also to be considered in any account of imperialism in the Third World.
My own proposal is that imperialism can be of variable form and type and can enter the periphery at different sectoral levels in the social formation. These sectors are in part drawn from Frank’s theorising but are mainly delineated according to the way production is organised in each sector (particularly in terms of relations of production and the ease of entry into the dominant class of a sector) and can be designated monopoly, state and competitive capital sectors. In this chapter I also look briefly at world system theory. World system theory aims to coordinate into theory the various dimensions of imperialism. I argue that coordination at this level leads to a sterile functionalism which is heavily deterministic and to a reductionism of crucial concepts such as state and class. An alternative approach to coordination which I follow in the thesis argues that the various dimensions of imperialism, multinational corporations, international trade and foreign investment each have a different impact upon the organisation of production in the periphery and, when coupled with states and classes, generates different class struggles at different sectoral levels in the social formation. Imperialism, seen from this perspective, becomes a more ad hoc process, a process in which metropolitan bourgeoisies are engaged in building alliances (in their own interest, of course) with peripheral classes, but a process which has for practical political purposes an overall indeterminancy (Reynolds 1981:97).

Monopoly and the Metropolis-Satellite Chain

Imperialism is one of the most confused words in radical discourse both at a political and a theoretical level. The term is one of the most powerful tools in the vocabulary of Third World political actors partly because of its theoretical cloudiness. External actors can be labelled imperialists, and this is negative, without clarification or qualification as to what is really meant. Third World academics also frequently use the term in its polemical sense in scholarly articles. This use of the term will be avoided here. In theoretical discourse the term is confused not only because of the many different versions of imperialism that are offered up as Marxist, but also because of a fatal dilemma that exists in all these offerings. Should
imperialism offer a) a theory of accumulation on a world scale or
b) an account of world (political) domination as exercised
through the global expansion of capitalism? The dilemma is
characteristic of the general problem in Marxism as to what is
the status of the political. Is it epiphenomenal as in the first
approach or is it central as in the second approach? The problem
is exacerbated by the fact that Marx himself never proposed a
theory of imperialism.

He presumably would have confronted the subject in
proposed books on the state, foreign trade and the world
market ...[but] we are left to speculate as to how he
might have integrated the theories of imperialism, writ
so large in the history of capitalism, with the theory
of accumulation. (Harvey 1982:439)

No attempt is made in this thesis to provide this level of
theoretical integration or even to attempt to survey the writings
of later Marxists such as Lenin, Hilferding, Bukharin and
Luxemburg, all of whom have attempted to fill the theoretical
gap. However, imperialism is crucially important empirically and
latter day theories of imperialism present in dependency are
important for the direction they provide in studying empirical
phenomena. Thus the question of expansionism or accumulation
needs to be debated and the choice justified. This choice should
lead to the development of a framework by which external factors
and their effect on the Third World can be understood.

Most theories of imperialism begin with the notion that there is
a link between the centre and the periphery provided by the world
market. Earlier theories of imperialism, by Lenin, Luxemburg,
Bukharin, were more concerned with the dynamics in the centre
that caused this linkage to be forged, than with the effects the
forging of this linkage had on Third World social formations and
their place in the world economy. Much of the debate of the
erlier theorists concerned who the central actors were in the
forging of this linkage, what principal type of international
capital expanded overseas, and, more abstractly, whether one
theory was more centrally grounded in Marxism than another.
Leaving aside this last question because as Harvey says, all these studies '... have been hard put to ground their findings in Marx's overall theoretical framework' (Harvey 1982:439), the answer to the second varied tremendously from Hilferding's notion of finance capital,\(^4\) (capital expanding as a result of fusion between financial capital and industrial capital centralised on the banks) to Lenin's notion of capital becoming overripe in the centre (a result of the development of finance capital - which meant that the export of this surplus capital became necessary) to Luxemburg's argument that centre capital as a result of underconsumption in the centre was forced to go overseas to find new markets. Bukharin attempted a synthesis of all these.\(^5\) The principal actors overseeing the expansion of capital also varied tremendously from Hilferding's emphasis on the role of international bankers, Lenin's emphasis upon trusts or cartels (today's transnational corporations) which represent a fusion of industrial and financial capital, or Luxemburg's emphasis on trading companies.

Whatever the type of international capital and whoever the principal actors were thought to be, the early imperialist theorists all argued that the thrust for capital to go overseas came from the reorganisation of capitalism in the centre. Capital was becoming more and more centralised in the form of monopolies. These monopolies were being forced to expand overseas, and as a result they effected a restructuring of capital on a global scale. The periphery became integrated into the world market through foreign monopoly capital. Foreign monopolies adopting global strategies, it was agreed, was the sole form capital took in going overseas and the emergence of the monopoly form of capital was the principal reason for the global expansion of capital. The expansion of capital also required the political reorganisation of the world which, in its first phases, took the form of the centre's dominance and control of peripheral territory. Lenin and Bukharin, whose theories were the most political of the early imperialist theorists, took for granted the fact that the colonial state was the hand-maiden of centre capital and that its task was reorganisation of the periphery for production of commodities required by the centre. In arguing
that inter-imperialist wars were the result of competition for colonial territory, Lenin had no need to incorporate a peripheral state dimension in his theorising, or to incorporate resistance or struggle in the Third World, for he could assume complete lack of political autonomy in the colonies.

Two developments occurred in the post-war period to shift the focus of studies of imperialism toward the effects of imperialism and underdevelopment on Third World social formations and away from the dynamics of centre capital expansion. The first was decolonisation of the Third World which meant that the responses of these states to imperialism could no longer be seen as predictable, as was assumed in the case of the colonial state. The second is described by Bernstein:

The expansion of the world economy arising from the post-war cycle of capital accumulation has been characterised by an immense growth of international corporations, and by their entry into the sphere of manufacturing industry (as distinct from the more traditional imperial activities of trade, finance, transport and resource-based industries such as mining, petroleum, and export agriculture). (Bernstein 1982:218)

These developments suggested the need to rethink imperialism. The expansion of transnational corporations (TNC’s) and their reorientation towards changing the patterns of production in the periphery, especially in the direction of manufacturing, posed the question of the linkage between imperialism and development, that is, whether industrialisation can take place in the periphery while the periphery remained linked into the capitalist world economy. It also raised the question of the political status of the 'new' states and the linkage between imperialism, development and the state, and the question of what development path the new states should adopt.

The diffusionists argued that development could take place in the periphery, though not under the aegis of foreign capital. The diffusionists felt that development in the periphery could occur even when the periphery was linked into the world market by developed country technology and trade patterns. Development
would occur only when it was the national bourgeoisie in the periphery rather than the metropolitan bourgeoisie which owned the means of production in the periphery.

Frank's answer for the dependency proper perspective was that industrialisation could not take place in the periphery because the periphery had been incorporated into the world market. The relationship between centre (or metropolis in Frank's terms) and periphery (or satellite) assumes the form of development in the centre and underdevelopment in the periphery because the centre exploits the periphery by appropriating its surplus.

The metropolis expropriates economic surplus from its satellites and appropriates it for its own economic development. The satellites remain underdeveloped for lack of access to their own surplus and as a consequence of the same polarisation and exploitative contradictions which the metropolis introduces and maintains in the satellite's domestic economic structure. (Frank 1969:33)

The basis for this underdevelopment, Frank argued, was the manner by which surplus was appropriated from the Third World via a chain of metropolis-satellite relations connecting all parts of the world system from the metropolitan centre in Europe or the United States to the rural areas in the peripheral countries. As Frank explains it in the case of Chile:

The monopoly capitalist structure and the surplus expropriation/appropriation contradiction runs through the entire Chilean economy, past and present. Indeed, it is this exploitation relation which in chain-like fashion extends the capitalist link between the capitalist world and national metropolises to the regional centres (part of whose surplus they appropriate), and from these to local centres, and so on to large landowners or merchants who expropriate surplus from small peasants or tenants, and sometimes even from these latter to landless labourers exploited by them in turn. At each step along the way, the relatively few capitalists above exercise monopoly power over the many below, expropriating some or all of their economic surplus and, to the extent that they are not expropriated in turn by the still fewer above them, appropriating it for their own use. Thus at each point, the international, national, and local capitalist system generates economic development for the few and underdevelopment for the many. (Frank 1969:31-32)
The metropolis-satellite chain of exploitation lies at the heart of dependency proper for this is the mechanism that is responsible for the 'sucking out' of surplus from periphery to centre, the mechanism which accounts for the global expansion of capital and which structures world political domination of the centre over periphery. Frank's metropolis-satellite chain of exploitation is established in the colonial period and remains unaltered by decolonisation. Thus the fact of political independence makes no difference to the satellite countries for it has not altered the fundamental economic relationships constituted in the earlier (colonial) period of imperialism. Nor does the role of the state change after independence for it operates as the instrument of international capital as it always did, though it now takes upon itself the trappings of neo-colonialism.

While Frank's focus was imperialism as an account of world (political) domination as exercised through the global expansion of capitalism and the effect this process had on peripheral social formations, he did claim to be basing his analysis on an understanding of the accumulation process. In the case of dependency proper this claim is made as in Lenin's theory, by arguing that accumulation in the centre is based more and more on the centralisation and concentration of production which in turn leads to a new stage of capitalism, capitalism on a global scale, monopoly capitalism. Frank argued that there were two distinct kinds of monopolistic relations involved.

The first, and the one that fits Frank's account best, is the monopolistic system of merchant capital, established in Latin America by the Spanish and Portuguese conquests and dominant there into the twentieth century. Merchants collect together products for export and for inter-regional trade, and distribute foreign and urban products. They are generally not directly involved in production, or, where they are, their activities in organising production are secondary. Mercantile monopoly may be associated with either pre-capitalist or (small scale) capitalist relations of production. The second kind of monopoly, which Frank does not distinguish clearly, is modern monopoly capital, characterised by largescale capitalist production. In underdeveloped countries, this typically appears in the form of multi-national companies, though
Both forms of monopoly are seen to be active within a metropolis-satellite hierarchy. Brewer argues correctly that these hierarchical structures are very different from competitive capital. His argument is correct but his reasoning is wrong. He seems to believe that competitive capital is a chain with only one link, the relation between workers and capitalists. Presumably he is arguing that competitive capitalism can not have an international dimension, which is certainly not the case, as will be made clear.

Frank’s work is well known so there seems little need to outline in greater detail his position. The main pillars of his theory of global expansion are the metropolis-satellite chain of surplus appropriation and monopoly capitalism. Monopoly capitalism is both the reason for centre capital expanding overseas and for unevenness in the distribution of production (disarticulation) in peripheral economies. For the purposes of developing a critique of Frank’s position and rethinking dependency proper’s view of global expansion we can summarise Frank’s arguments as follows:

1) all capital from the centre comes into the periphery in the form of monopoly as a result of changes in the centre’s accumulation process (a proposition borrowed from earlier Marxist theories of imperialism); 2) monopoly capitalism was dominant throughout the social formation via the distribution of surplus through the hierarchical chain and as a result competitive capitalism is displaced (an argument which distinguishes dependency proper from other theories of imperialism); 3) it mattered less whether monopoly reorganised production in the periphery or the form that reorganisation took, than the fact that the overseas actor was a monopoly.

There have been important theoretical developments from within the dependency proper perspective especially in the varied, voluminous work of Samir Amin (1974, 1976). Amin accepts the
crucial importance of monopolies in shaping the periphery. However Amin does not accept that the metropolis-satellite chain of exploitation is the mechanism that causes underdevelopment. Instead, he argues that a new period in the development of capitalism began after 1945 which made it possible for some development to occur in the periphery. The peripheral countries began producing goods locally that had previously been imported, but everything continued to function within the framework of the world market, only the forms of international specialisation being changed. In this case, too, a blocking of growth was inevitable. (Amin 1976:189)

Amin thus altered Frank’s view of how external factors made their impact on domestic structures. Frank - guided by the logic of the metropolis-satellite chain of exploitation - treated internal social, political and economic structures in the periphery in a quite unrealistic fashion as if they were constructed layer upon layer in a stratified manner. Amin argued that the way in which production was structured in the periphery was directly determined by the peripheral economy’s relations with the world market and that the defining feature of this structure was its diffusion or disarticulation into sectors or firms ‘that are juxtaposed and not highly integrated among themselves, but are each of them strongly integrated into entities the centres of gravity of which lie in the centres of the capitalist world (Amin 1976:238). Amin, as Chilcote notes, remained committed to the notion however that peripheral development was ‘the development of underdevelopment’, that autonomous development in the periphery is impossible. Amin also argued that, given the periphery’s integration within the world market, the periphery is without adequate economic means to challenge foreign monopolies’ (Chilcote 1981:292).

**Sectoral Disarticulation and the State**

Dependency proper has been found to be inadequate both in its analysis of global expansion and in its understanding of the accumulation process. The metropolis-satellite chain of surplus
appropriation was thought to be a partial explanation for global expansion for it maintained the primacy of a system of sovereign states and failed to explain exploitation as a global system. Wallerstein’s world systems theory – which Frank himself later adopted – grew out of this critique of dependency proper. World systems theory aimed, via the notion of unequal exchange, to view the world as a more coordinated and integrated system of exploitation than dependency proper posited. In a later section of this chapter I subject world systems theory to an extensive critique. Dependency proper has also been criticised because of the inadequacy of its view of the accumulation process. This criticism leads in two directions. On the one hand it leads back to study of the centre’s accumulation process as in international division of labour theories, as embodied in the view that

implicit in the concept of imperialism, which has been predominant during the 1960s, is a global system determined by factors in the Centre’s accumulation process. But these factors have not been specified in any detail. Imperialism thereby becomes an unspecified ‘system of exploitation’. (Marcussen and Torp 1982:140)

On the other hand, Frank’s understanding of accumulation is criticised by Marxists because it speaks of surplus rather than production (Brenner 1977). Both criticisms of Frank’s understanding of the accumulation process suggest that monopoly capitalism is not by itself a sufficient explanation for the process by which capital expands overseas and even less adequate as an explanation for the process of exploitation which goes on inside the peripheral social formation. While these criticisms of Frank are generally correct, one must be careful which line one follows. There is no point in taking up the critique of the internationalisation of capital school when this line leads directly back to a study of accumulation at the centre.6 This is not a key problem under study in this thesis. The Marxist critique is illuminating and will be discussed in great detail in the section on class7 but for the purposes of this section the most useful8 line of critique of Frank is to attempt to extensively criticise his position without leaving the terrain of dependency proper and therefore without losing the problematic of imperialism’s effect on Third World social formations.
Frank is incorrect in arguing that all capital from the centre comes into the periphery in the form of monopoly, whether it be monopoly capital or mercantile capital. This error is partly caused by the inadequacy of his definition. As Frank uses the term, it means capital that is large scale, that uses advanced techniques and that usually introduces capitalist social relations. There are ambiguities, as in the case of agricultural corporations, but even in this case Frank could establish that such corporations have a monopoly over the distribution of the surplus. However, the more usual definition of monopoly, requiring barriers to entry from outside through a form of closure against competitors, suggests doubts that all capital entering the periphery from outside can be considered monopoly capital. Empirically this seems clearly to be the case. On the one hand international capitalism has changed since 1945 in that the rise of international organisations has facilitated the international circulation of a great deal of state capital. On the other hand, competitive capital also circulates internationally. In Papua New Guinea, for example, many enterprises have functioned largely as branch offices for small Australian capital. Further the situation in recent years in PNG has been that this small overseas capital has come into competition with local capital, since it is small. This overseas capital is driven to the periphery not as a result of changes in the centre’s accumulation process but simply in pursuit of profit. It is centre, competitive capital, now overseas, entering a competitive capital sector in the periphery which best explains the role of this small capital in peripheral development. Competitive capital of this type has two levels. One (like monopoly capital) is the distribution of surplus between centre and periphery. The other is the more obvious level between worker and capitalist referred to earlier by Brewer. The same may be said for state productive capital.

If competitive capitalism is still a feature of the periphery and if this sector can include overseas actors who enter as competitors, then Frank’s notion that monopoly capital is dominant throughout the social formation via distribution of the surplus through the hierarchical metropolis-satellite chain is
also upset. This can be shown to be the case empirically also. If we take an industry like the coffee industry which, in the abstract, is a competitive capital industry because the barriers to entry at every level are not great, then we can see that the surplus can be sent overseas from the competitive capital sector. The surplus does not need to pass up through a chain whose pinnacle is a monopoly capitalist. Frank's notion of the centre-periphery distribution of surplus is correct, but his argument that the periphery was united by a vertical chain is incorrect. The chain is linked horizontally between centre and sector, and not vertically as unified by monopoly capitalism.

In the same way that international capital enters the periphery in different forms (monopoly capital or competitive capital) so, it enters the periphery as different types of capital. International capital cannot be reduced to a single dominant type as Frank does by emphasising the role of multinational corporations, as Nabudere (1977) does in emphasising the role of finance capital, and as Emmanuel (1972) seems to do in his emphasis upon international trading capital. The type of capital which enters the periphery also has effects upon the reproduction process of dependent social formations. In Tanzania, for example, the dominant type of international capital is financial capital—credit from the World Bank. Financial capital—credit is capital at the level of exchange which Marx rightly felt was a type of capital which plays a limited role in the reproduction of capitalism. It is limited because it may be more interested in a return on investment than accumulation through the reorganisation of production in the periphery on the basis of wage labour. The great importance of household production in competitive capital export industries throughout the Third World is, as Kay (1975) argues, a testimony to the limits of certain forms and types of capital in revolutionising the production process in the periphery.

The recognition that international capital may enter the periphery in forms other than monopoly capital is rewarding, for it leads to a new conceptualism of the mechanism for distribution of the surplus. It would appear that the distribution of surplus
takes place by way of the horizontal linkages of sectors in the periphery (monopoly capital, competitive capital, and state capital sectors) to the centre. This is a quite different conceptualisation from Frank's notion of vertical linkages between the peripheral social formation as a whole and the centre via monopoly capitalism. This new conceptualisation endorses a shift in the focus of the effects of imperialism on peripheral social formations away from the mechanistic structuring of the periphery in the interests of international capital and towards dependency proper's other notion that the effect of imperialism is unevenness in the distribution of production (disarticulation) in the periphery. It is the existence of disarticulated sectors within the periphery, disarticulation caused by the different form taken by international capital as it enters the periphery and links each sector quite separately to the centre which best explains the unevenness of production in the periphery which Frank originally identified.

Frank is correct to argue that the periphery as a whole is structured in the interests of centre capital, but he makes the mistake of not being receptive to the quite different relations between the centre and industries in different peripheral sectors generated by different forms of international capital. Frank may also be correct to argue that when international capital enters the periphery in its monopoly capital form the peripheral sector is wholly structured in the interests of monopoly capitalism. But in making this argument he neglects to note that other forms of international capital also enter the periphery, such as competitive and state capital. The effect of these other forms plus the various types in which international capital can enter the periphery may create peripheral structures of a far less deterministic nature. Frank fails to see that heterogeneous international capital operates in quite different contexts outside the periphery and consequently the metropolitan bourgeoisie can be engaged in quite different class projects in different peripheral sectors and industries.

The recognition that economies can be differentiated into monopoly, state and competitive capital sectors has been argued
for advanced social formations by O'Connor (1973), Habermas (1976), Offe (1976), Frankel (1983) and other critical sociologists. Habermas outlines these sectors:

According to the model, private production is market-oriented, one sub-sector still being regulated by competition while the other is determined by the market strategies of oligopolies that tolerate a 'competitive fringe'. By contrast, in the public sector ... huge concerns have arisen whose investment decisions can be made almost without regard for the market. These concerns are either enterprises directly controlled by the state or private firms living on government contracts. In the monopolistic and the public sectors, companies are faced with strong unions. In the competitive sector workers are less well organised, and wage levels are correspondingly different. In the monopolistic sector, we can observe relatively rapid advances in production. In the public sector, companies do not need to be rationalised to the same extent. In the competitive sector, they cannot be. (Habermas 1976:34)

In advanced social formations, as Habermas shows, the sectors are differentiated by the different mode of labour control existing in each sector. Though labour control distinguishes one sector from another, it is not a factor which causes disarticulation between sectors in advanced economies. Indeed the situation is quite the reverse, for there is a growing interdependence between sectors. The state capital sector, O'Connor argues grows along with the monopoly capital sector integrating the entire economy in the interests of monopoly capital (O'Connor 1973:24).

In a peripheral economy, the sectors also contain different modes of labour control but in the periphery this is not the main criteria by which sectors are differentiated. The distinguishing feature of the peripheral economy is its disarticulation into sectors as a result of sectoral linkages to the centre by heterogeneous forms and types of international capital. It is this linkage rather than the mode of labour control that gives the sectors in the periphery their specificity. It follows also that the role of the state capital sector plays a different role in the periphery to that identified by O'Connor for advanced social formations. Rather than providing an integrating role for an economy dominated by monopoly capital the state capital sector
functions as a prize in the class struggle. Domestic capital must enlist the support of the state not necessarily because it is weak vis-a-vis international capital - which might be in its competitive capital form and therefore almost as weak - but as a result of the difficulty of reproducing itself in a disarticulated social formation. Thus the state capital sector in the periphery grows as a result of the lack of integration in the peripheral economy rather than as an agent of integration as in the centre economy.  

Obviously different types and forms of international capital will have different effects upon each peripheral sector and industry so it is not possible to specify in general terms precisely how international capital draws linkages between centre and peripheral sectors and how historically a disarticulated social formation emerges in the periphery. This is an empirical question. However, merely positing the theory of an heterogeneous, uncoordinated process of international capital movements which has varying effects on the periphery does raise at least two major theoretical problems. The first is that heterogeneity of form and type of international capital makes problematic the site of exploitation. Is exploitation taking place primarily at the external level in terms of centre/periphery or is it internal to a social formation in terms of the capital/labour relations? So far, I have looked only at the question of imperialism and therefore mainly at arguments about the external sources of exploitation. However if, as has been argued, the effect of international capital on the periphery is largely indeterminate and if monopoly capital can not be considered to have a pervasive influence on centre/periphery relations then it seems to follow that the distribution of surplus between centre and periphery may not be the sole reason for exploitation. This is of course the case. The next two sections will be devoted to showing how it is possible to continue to view surplus distribution as a major aspect of exploitation at the level of internal/external relations while acknowledging that classes are not formed as a result of this distribution and that it is the capital/labour relation inside the peripheral social formation that is the prime site of
exploitation. However, this argument rests on the more detailed treatment of the internal and external role of the state and the way it constitutes class struggle which will be presented in Chapter 3.

The second and related problem that arises as a result of an analysis resting on the heterogeneity of form and type of international capital is that the political determinacy that was present in Frank's work, i.e., exploitation of the periphery by the centre, is lost. This may not be a bad thing. It may ensure that the specificity of the political becomes an integral part of the study of imperialism rather than the political being axiomatic and therefore assumed as is usually the case. It is true that 'relations between economic activities and the state, and between these and inter-state relations, are crucial to any account of Imperialism' (Reynolds 1981:85) but the political determinancy in the theory of monopoly capitalism has caused a downgrading of the role of the political in the study of imperialism.

The shift in the study of underdevelopment towards disarticulation of sectors in the periphery elevates the importance of the peripheral state in the process of underdevelopment. Disarticulation is the direct result of the differentiation of the peripheral economies into sectors rather than an epiphenomenal result of monopoly capitalism. Disarticulation of sectors which are linked to the centre via the various forms and types of international capital becomes the key barrier to development for it means that the periphery does not have within itself control over its own reproduction. The peripheral state plays a crucial role in this process.

On the one hand, the state contains within itself the promise of integration. It is the peripheral state through its allocative and interventionist roles which in the absence of integration by monopoly capital becomes the only social force capable of overcoming disarticulation. State appropriation of surplus in the periphery is massive and multi-faceted.
This appropriation can take numerous forms such as - the surplus being privately produced and realised on the market. The state appropriates its share through taxes, etc. - the surplus being cooperatively produced and realised on the market. The state appropriates its share through taxes, etc. - the surplus being privately produced, realised by the state (state trading concerns) and distributed by the state. - the surplus being produced in state concerns. The state is the direct 'producer' and appropriator, and it distributes the surplus. Other features of the state's economic role include: the shares of private, cooperative and state enterprise in the sectors of industry, the share of foreign capital, the share of the internally and externally realised surplus. (Ziemann and Lanzendorfer 1977:147)

Ziemann and Lanzendorfer add that these massive state interventions in production combined with the inflation of the state apparatus is often 'designed to maintain those means of production which do not produce themselves' (Ziemann and Lanzendorfer 1977:164). All forms and types of international capital which enter the periphery, as well as any local capital fortunate enough to capture parts of the state, come to depend on this maintenance function of the peripheral state.

However the promise of integration by the peripheral state cannot be fulfilled because the state is maintaining a disarticulated social formation. The nature of this maintenance function is circular for while it arises as a result of heterogeneity in form and type of international capital it is perpetuated, as Ziemann and Lanzendorfer (1977:164-80) show, by the social reality of a fragmented and unstable class structure and a relative social weakness of the dominant class in the periphery, itself a byproduct of the dependent and disarticulated reproduction process. This is the flexibility relationship between the state and economic development which Engels long ago observed (quoted in Mars 1981:102) and which concretely makes itself evident in the very general development plans and policies sponsored by peripheral states. It is this contradictory role of the state midway between integration and disarticulation, coupled with its strategic location in centre/periphery relations, that establishes the external role of the peripheral state as being that of midwife to international capital.
World Systems Theory - An Alternative Rejected

It seems necessary to acknowledge at this point that the direction my theorising has taken on the question of imperialism is not the usual one that follows from a critique of dependency proper. Instead of dissecting dependency proper in a minute way as I have done and making suggestions which attempt to remain on its terrain critics of dependency proper have generally chosen to be dismissive and to argue that a full understanding of imperialism requires a more holistic level of analysis, at the level of imperialism as a world system. In the critique of world systems theory which follows my purpose is to justify why my own analysis has not followed this more usual path. I will argue that it follows from world systems theory that class struggle is a global matter and that the state is an agent of global capitalism. This is a functionalist and reductionist view of state and class and one which compares badly with my own view of imperialism which incorporates a significant degree of political contingency and does not therefore reduce state and class relations to the logic of capital at either the external or internal levels.

World systems theory (WST) is based on the notion of a world economy, capitalist since the 16th century, as the unit of analysis. In this theory, greater prominence in understanding social change is given to the dynamics which drive the global economy than to state and class structures in the periphery. World systems theory rests on six basic theses which can be regrouped under the main concerns we have explored in the first part of this chapter, namely 1) the view of expansionism embodied in the theory, 2) the role of international capital and its class effects, 3) the role of the state and the specificity of the political. World systems theory is a theory of global domination and expansion. Expansion is driven by the pursuit of profit on the world market through international trade in bulk commodities. Trade in the world economy takes place on the basis of different divisions of labour existing in three different zones, centre, periphery, semi periphery. Each major zone of the world economy has an economic structure based upon its particular mixture of
economic activities (e.g., industry and differentiated agriculture in the core, monoculture in the periphery, each with its characteristic form of labour control). The different zones are differentially rewarded by the world economy with surplus flowing disproportionately to the core areas. Moreover, the economic structure of each zone supports a dominant class which is oriented toward the world market. States operate in the interests of their particular dominant class but their capacity to do this varies with the zone, i.e., states are strongest at the centre, weakest in the periphery. The core states being strongest, act globally in the interests of core dominant classes to maintain the system of unequal exchange and the world economy as a whole (Skocpol 1976:1077).

Wallerstein's theory, like dependency proper, is based on the centrality of expansionism. He goes further than dependency for he manages not merely to assert the primacy of the exchange of surplus but to redefine exploitation away from the appropriation of (surplus) labour and make exploitation itself derivative of the distribution of the surplus. Wallerstein achieves this reductionism in two steps. Firstly, by his misreading of the sphere of production and secondly, as discussed later, by his simplistic view of the role of the state. The first reductionism, as Brenner (1977) shows, is the result of differentiating the world economy in terms of the 'mode of labour control'. In doing so, Wallerstein ignores labour's role in the material production of a commodity as the source of surplus value and focuses instead on the market capacity of labour to get a better deal from employers. Though Wallerstein's analysis is historical he argues, for example, that the more backward the mode of labour control the less likely labour is to be rewarded at its market value. This is an analysis based on market relations in the manner of the Liberal economists. It is this that Brenner and others have objected to though, in the light of my earlier argument, it is important to remember that Brenner was not criticising per se the assertion that surplus might have something to do with exploitation. Brenner was not arguing that theories of imperialism cannot focus on world (political) domination as exercised through the global expansion of
capitalism and instead must focus on accumulation on a world scale. In fact Brenner rejected the latter alternative very explicitly for he was at pains to argue that one cannot define social patterning (i.e., class) by production and accumulation as processes of a world division of labour (see Andrews 1982:146 for a restatement of the Brenner view).

However, Brenner is concerned along with Skocpol (1976:1079) and other Marxist critics, to reestablish the essential point that exploitation is initially and fundamentally a question of appropriation of labour at the point of production. Skocpol writes, 'that the social relations of production and surplus appropriation are the sociological keys to the functioning and development of any economic system' (Skocpol 1976:1079) and goes on to explain that 'this Marxist idea' influences directly the analysis of class formation and leads to a recognition that social change is the result of the institutionalised conflict between producing and surplus appropriating classes. It is its basis in the process of production that gives the Marxist concept of class its theoretical rigour and its dynamics. Both vigour and dynamics are missing from stratification accounts which are based on epiphenomenal forms of inequality such as market chances. World systems theory views class in its epiphenomenal sense for class is derived from both the world market and from the hierarchy of global inequality from core to semi-periphery to periphery.

World systems theorists have in the past hesitated to push their class analysis to its logical conclusion, i.e., to posit the existence of global classes. But even asserting in a non-class way that 'the capitalist world economy is a totality - its structure, its historical evolution, its contradictions - is the arena of social action' (Wallerstein 1975:375) implicitly raises the old Bukharin idea of the existence of global classes. Hopkins has now put the idea explicitly.

All I want to do is to pose a question: are we not perhaps witnessing today the formation of an increasingly organised world capitalist class (in contrast, specifically, to alliances among national
bourgeoisies)? Such a class, were it in formation, would not be lacking in 'organs' for acting on the world scene: leaving the multinationals to one side, there's still the World Bank, the I.M.F. and so forth. True, these agencies have not so far taken on the governments of the strong states. But they certainly have taken on those of the weak peripheral and semiperipheral states, and have repeatedly done so specifically in opposition to the efforts of these states - feeble enough that they are - at 'national development', and in support of world (anti-national) capitalist development. The other has to do with the world's working class(es).... Even if such a global labour market is developing incipiently, however, the organisation of these selling labour power, so that they may in turn 'organise' that market, seems at present a more distant prospect. (Hopkins 1982:88-89)

But the idea of global classes is empirically and analytically absurd. How could the notion of a global bourgeoisie, a dominant global economic, class be sustained at a time of a resurgence of protectionism, of splits within the OECD countries, of antagonism between these countries and the I.M.F. on this very issue and of the crucial role played by OPEC in the circulation of international capital and the decline of the dollar as an international currency. Analytically the whole idea of global classes is unsound, as Andrews argues:

This application of a term taken from the realm of production to combinations of nations pre-empts the possibility of applying it to social forces located within national boundaries and extending beyond them. It seems that, to be understood, extended capital accumulation on a world scale needs to be situated within specifically capitalist social relations of production (the commodification of labour power). To situate it outside any such system of social relations and locate it exclusively within a trade-based division of labour between the global core and periphery will distort the picture of capitalist development. (Andrews 1982:147)

Somewhat paradoxically, this elevation of class to the global level and the focus upon international economic forces has not allowed WST to draw a convincing connection between international capital and class. Partly this is due to the inadequacy of class in WST but it is also a result of the inadequacy of WST in its analysis of international capital. WST does not really provide a convincing account of the different forms and types of capital
which circulate on the world market and apart from the centre, semiperiphery, periphery categorisations can not offer an account of the different effects variable forms and types of international capital have in a social formation. In WST variable types and forms of international capital are of secondary importance to the dominance of the centre over the periphery and to the system and market functionalism that reproduces this dominance.

WST is even weaker in its view of the role of the state and its conception of politics. The view of the role of the state offered in WST is slightly more sophisticated than Skocpol would allow: 'a reduction of state structures and policies to determination by dominant class interests' (Skocpol 1978:1079). But its analysis of the form (strong or weak within the world system) and function (ascent or decline within the world system) of the state remains simplistic. WST political analysis stems from what is regarded as a basic disjunction in the world system namely that the market is integrated and the polity is not. The world political system is made up of various national units but these units are not autonomous. They develop in accordance with market opportunities, economic trends, and conflicting economic interests' (Andrews 1982:137). The lack of integration creates a degree of voluntarism at the global level. The non-integrated global polity means that in circumstances of constant change in a state's relative position (e.g., as a result of dynamics in the world market), the form of the state and whether it is strong or weak (or where it is on the spectrum) becomes crucial for maintaining a position in the global hierarchy. The function of states (after dominant groups have captured the state and moved to strengthen the national government apparatus and the state) is to protect their position and improve their status within the international pecking order of surplus extraction.

The role of the state can only be accepted as the ascent or decline within the world system if it is agreed that a state's form is defined by it being strong or weak at the global level. One also has to be sure that the capture of the state by nationally dominant groups can be achieved in full. It also must
be accepted that all national and sub-national political activities are in the final analysis globally specific that, for example, all the effort and energy devoted to development plans and policies can be understood to have a role to play in the attempt by states of a more advantageous position within the world system. Politics and the role of the state is immensely more complicated both internally and externally than this scheme would allow for.

The great claim for the determining role of the world polity may only mean that insufficient attention is being paid to the local political and class forces that lay behind it. This lack of attention makes it harder to link the shifting social and political currents inside a nation with the changing opportunities and pre-established constraints set by the prevailing organisation of production at the global level. The two sides of the link are reciprocal and mutually constitutive; they define and shape each other. (Andrews 1982:152)

Conclusion

It is essential to make the point that this thesis grows directly out of critiques of the various theories of imperialism. The thesis aims to show precisely how both internal and external factors are linked, reciprocal and mutually constitutive and how they define and shape each other. The starting point is a recognition of this link but one can proceed only by developing a sound analytical framework. This is Skocpol’s point when she argues that

instead of exclusively pursuing Wallerstein’s world system approach, we should investigate the world-historical emergence and development of capitalism in terms of hypotheses about variations in both 1) institutionalised class relations of production and exchange, and 2) patterns of state structures and interstate relationships, without simply reducing the latter to the former. To be sure, markets and patterns of trade are bound to be part of the picture, but it seems unlikely that they can be understood in their origin, functioning, or effects except with reference to changes in class and political structures. The alternative picture of world capitalism that is likely to emerge from historical analyses pursued along these lines will probably pertain to intersecting structures...
In this section I have begun the task of building an alternative framework along the lines suggested by Skocpol by reassessing the role of imperialism in that framework. It follows from the points I have made in this chapter that the effect on the periphery of international capital in its various forms and types is for practical political purposes indeterminate. I do not accept that functionalist position that imperialism mechanically causes internal change in the periphery. Yet, somewhat paradoxically, I also argue that it is desirable to remain on the theoretical terrain of dependency. Hence there is a need to recognise that imperialism can have an important effect on the structuring of state and class relations in the periphery. This argument is achieved by noting that while international capital has a structured effect upon the peripheral social formation this effect can only be discovered empirically. To discover the political effect of imperialism in the periphery it is necessary to trace precisely the historical process by which different types and forms of international capital enter the periphery and attempt to build alliances with local class and state actors. Thus while the structural effects can be stated conceptually the political and class effects of imperialism must be explored empirically. The notion of overall political indeterminancy means however that the analytical framework for uncovering 'intersecting structures involving various and autonomous logics and different though overlapping historical times' can not be built on a study of imperialism alone.
Endnotes

1. Its full title is the 'Committee on Comparative Politics of the Social Science Research Council'.

2. Emerson's, 'Nation Building in Africa', is a vivid illustration of this point. Emerson wrote that the prime need for building a sense of national community in the new states is that at least a substantial segment of the people (in this literature this is generally a reference to the middle class) come to feel that their vital interests are linked to the state. He felt that the gap between modernity and traditional life could be partly closed by '... the adoption of such ceremonial forms as drums, dancing, and the use of traditional dress, as well as by seeking to equate the position of the political leader with that of the chief.' (Emerson 1966:194)

3. 'Imperialism' will be used here as a broad term denoting economic, political and class effects of external intervention in the periphery. The term 'international capital' will be reserved for external economic forces which act upon the periphery, namely foreign trade, aid and investment.

4. A great deal of confusion is continually and unnecessarily caused by the failure of many analysts to attend to the difference between finance capital and financial capital. Finance capital is a thesis taken up by Lenin which argues that banks and industrial capital have become combined under the hegemonic leadership of one or the other fraction. It is the monopoly power of this combination which gives international capital its global power. However, clearly this hegemony can be unmade just as it is made so that the existence of finance capital has to be continually shown and cannot be assumed. Financial capital is simply bank capital and credit. It is an empirical reality, the existence of which does not require demonstration. However, nor does there attach to the concept of financial capital any pre-conceived theorems relating to its global influence.
5. Bukharin’s work can be considered a synthesis because he at least tried to show that, just as imperialism is globally powerful, it also is limited in the extent to which it can restructure the world.

Bukharin conceived imperialism to be a necessary stage of capitalism ... Capitalism in his view was expansionist in nature, creating a world market economy in which national economies are enmeshed in a network of interdependent relations. The trust or cartel is the means of regulating and organising this system ... The dynamic of expansion is seen as being the crisis of overproduction and the consequent need to expand the market. Capital, in seeking the highest rate of profit, is invested abroad. But capitalism does not succeed in creating either unity or equilibrium in the world at large. (Reynolds 1981:75-76)

6. I do not want to discuss in detail internationalisation of capital or international division of labour theories. It is sufficient to restate Beckman’s view that

The studies of the internationalisation of capital are just as centro-centric as was Lenin’s theory of imperialism. They suggest much about the laws of motion at the centre and the international movements of capital to which they give rise. They tell us less about the way such internationalisation interacts with the development of capitalism in the periphery, except in terms of penetration and imposition. The role of class struggles in the Third World in structuring the preconditions for the development of the system as a whole is given little attention. (Beckman 1981:10)

7. The section on class will look more closely at the capital/labour relation in the periphery and evaluate the various attempts to understand this relation, especially as it bears upon the role of the peasantry, including articulation of modes of production theories and the reproduction theories of Banaji and Bernstein.

8. This is the most useful way to proceed in the study of imperialism for attempts to synthesise the two critiques have been brief and not altogether convincing. For example, Ziemann and Lanzendorfer attempt to argue that
division of labour, exchange and distribution relations are relations of production which in their totality possess a specific quality differing from the sum of these separate relations of production, i.e., the relations of dependence are a 'relation of production on a higher level. (Ziemann and Lanzendorfer 1977:156)

But they do not develop this argument.

9. Coffee can be, and is, grown and exported by foreigners in the periphery in direct competition with local capital.

10. While the dependency proper theorists differ on many points, this is one common area of agreement. As Ougaard notes, 'In general, though, there is agreement on the point that a central part of the syndrome [of dependency] is the lack of internal linkages between sectors in the economy, and the existence of strong external linkages.' (Ougaard 1982/3:387)

11. This leads precisely to the important point made by Amin (1976).

In this sense one ought not to speak of underdeveloped national economies, but to reserve the adjective 'national' to the autocentric advanced economies, each of which alone constitutes a true, structured economic space, within which progress is diffused from industries that can be regarded as poles of development. The underdeveloped economy is made up of sections, of firms that are juxtaposed and not highly integrated among themselves, but are each of them strongly integrated into entities the centres of gravity of which lie in the centres of the capitalist world. What we have here is not a nation, in the economic sense of the word, with an integrated internal market. Depending on its geographical size and the variety of its exports, the underdeveloped economy may appear as being made up of several 'atoms' of this type, all independent of each other (as with Brazil, or India) or of a single 'atom' (e.g., Senegal, which is entirely organised around the groundnut economy). (Amin 1976:238)

12. The 'reproduction' problem is immediate for the ordering of economic priorities of the peripheral state. Marcussen and Torp note that
since the peripheral nations are inevitably included in the reproduction process of the industrialised capitalist countries (the Third World countries deliver raw materials necessary for the continued accumulation of the industrial nations as well as agricultural products for the reproduction of their labour force), their socio-economic formations are externally directed and not internally integrated. In fact, the Third World countries are missing a reproductive sector themselves. Lacking this reproductive sector of their own, these countries have to import this from the outside in the form of means of production. In order to increase their opportunities to import means of production on an increased scale - and thereby the possibility of an increase also in the productivity of labour - the peripheral countries have to raise their export earnings, by an increased productivity in the agricultural and mining sectors. The import purchasing power of the peripheral countries is, therefore, closely bound to the success of the state in raising (exportable) national output. This productivity increase in agriculture most often takes place through importing technology and machinery, high yielding varieties of seed, pesticides, etc. The international aid organisations often finance package programmes intended for this purpose; and the local processing of raw materials is financed through direct investment, or combinations of investment such as state/foreign or state/private-national capitals.

The lack of an internal reproductive sector is also the reason behind the need for foreign investment if a capitalist industrialisation strategy is to succeed. Only by creating an investment climate favourable for international capital can the peripheral state get industries which, although geared towards the world market, could contribute to the beginnings of an interlinking of the different economic branches domestically. (Marcussen and Torp (1982:157)

13. This term is borrowed from Ziemann and Lanzendorfer (1977:164) though used here in a different way.

14. World systems theory like dependency theory has generated a vast literature which is almost impossible to survey thoroughly. Even a survey of basic propositions is made difficult the eclecticism in the thinking of Wallerstein and others. For this reason I rely heavily in this section on...
the critique and overview of world systems theory provided by Andrews (1982) and Skocpol (1976). For recent thinking by the theorists themselves, Hopkins and Wallerstein (1982).

15. It should not be surprising that the direction of this thinking should dominate critical approaches to dependency proper for it has been given massive legitimacy by the fact that Frank himself has abandoned dependency proper and adopted a world systems perspective (Chilcote 1982:4).

16. As an example of what is meant by forms of labour control, WST talks in very general terms of skilled wage labour in the core, sharecropping in the semi-periphery and slavery or coerced cash-crop labour in the periphery.

17. The idea of locating the actual site of differentiation among dominant classes is a good one and will be used in the next section on class, though my analysis locates differentiated classes within social formations not globally.
APPENDIX B — CLASS AND THE PERIPHERAL STATE

I believe there is some urgency to our getting to work on the theoretical connections - the processes - linking class as a category of production to class as a category respectively of social formations and of political actors or agencies. (Hopkins 1982:83-84)

Introduction

Class analysis and the role of classes (class conflict, class struggle and class alliances) in the periphery have been clouded by some major sources of theoretical and empirical confusion. Much confusion was generated at the time of decolonisation when the class projects of the (class) forces that put together the independence compact were massively and often purposely misconstrued. This has manifested itself in four mistaken approaches to the analysis of class in the periphery. First, the Soviet line, couched in the language of Marxism but usually a mask for national (and imperialist) ambitions in the Third World, was that the national bourgeoisie in the Third World could be progressive, that it could pursue a non-capitalist path of development, neither capitalism nor socialism, on the way to breaking with international capital and Western influence. Almost as confusing is the left liberal approach to class which goes in search of class in the periphery armed with non-Marxist stratificationist analytical tools. This approach tends to define class action solely in terms of class consciousness. It searches for a revolutionary working class and it usually fails to understand the common non-congruence between class and political parties in the periphery. In this way the left liberal approach usually ignores the class specificity of the peripheral social formation.

I do not dwell on the Soviet or left liberal approaches to class but instead focus on the two main approaches to class analysis in dependency theory. After uncovering the inadequacies in the approach to class in both the diffusionists and dependency proper I suggest that a starting point for overcoming these problems is to follow Samoff (1982) and return to first principles of class analysis. The analysis then moves to the task of detailing the
class specificity of peripheral social formations. I begin by setting down some basic guidelines to the study of class, defining class location, class relations, and the difference between class conflict and class struggle. I argue for an analysis of class founded on the appropriation of surplus value at the level of production, production which takes place in the periphery wholly within a monopoly capital, competitive capital or state capital sectors and industries. I suggest that the process of accumulation generates in each sector an exploiting and an exploited class (and usually an intermediate social category) but that class relations (patterns of domination) within these sectors are constituted by the state.

Common observation seems to suggest that the class structure in the periphery deviates quite markedly from Marx's two-class theoretical model and from industrial societies where, historically at least, there has been a tendency toward the polarisation of class. In the periphery there are usually at least four umbrella classes - the peasantry, the bourgeoisie, petty bourgeoisie and the working class. Each umbrella class has an integral class location in the peripheral social formation, each has important gradations within it and none can be said to be shrinking or emerging. The overriding problem of class analysis in the periphery then is to determine to what extent the analysis of class can rely on orthodox precepts and to what extent it has to be adapted to suit the specificity of the peripheral situation. This thesis cannot pretend to resolve the theoretical problem of an integrated approach to class in the periphery but it can argue the case for the adoption of certain guidelines for analysing class which are rigorous and which must form part of an integrated theory. These guidelines can be studied in terms of both their theoretical rigour and their political import.

I begin with a discussion of the role of the national bourgeoisie, for historically its status was probably the earliest class question asked in the periphery and later its role in the process of national development indeed become crucial.
The term bourgeoisie originally referred to a specific class, the owners of industrial production, particularly in the conflict between these owners and the then-ruling class, the landed nobility. Once this new class gained power, bourgeoisie became synonymous with 'ruling class,' and it is in that sense that is most often used today. (Samoff 1982:125)

The term 'bourgeoisie' is not used in this thesis to refer to a ruling class but is used in its original sense to define a class which is engaged in a network of production relations based on the appropriation of relative surplus value whose production takes an industrial form. The crucial change from the original use of the term 'bourgeoisie' is to drop the criterion of ownership and substitute for it control and/or ownership. This is necessary because in the periphery much of the ownership of the means of industrial production is state ownership. In the case of state ownership, a bourgeoisie can still be identified if it has control of the ownership of the means of industrial production due to its structural location in the branch of the state responsible for industrialisation.

The fact that this emerging 'bourgeoisie' in the periphery was in conflict with the old ruling class, the landed nobility, was the starting point of a series of theorems first stated by Baran (1973), which still determine the course taken by much of the debate on the national bourgeoisie. Baran argued that the existing classes - the landed classes, who were feudal in orientation, and the mercantile interests, enterprises that acted as suppliers, agents, sub-contractors and those in import and export business - were a comprador bourgeoisie. These classes, Baran argued, were uniformly hostile to development. The industrial bourgeoisie was small but it could be progressive. However, it was concerned first and foremost to protect its own monopoly position even if that action was detrimental to development. In any case Baran believed it was foreign capital, the metropolitan bourgeoisie, which is dominant in the periphery and foreign capital is opposed to economic development because it would threaten the cheap supplies of labour that it enjoys, and because it would involve higher taxes and a division of state economic support for the promotion of internal development to the
neglect of the 'needs' of the export sector for specialised infrastructure.' (Baran's position is carefully summarised by Brewer 1980:155).

The Diffusionists and Class Analysis

The confusion and faulty methodology in dependency theory arises from Baran's class analysis. The diffusionists took up Baran's idea that the national bourgeoisie could be progressive. They argued that

In overcoming the power of the landlords, the national bourgeoisie (the manufacturing class) will provide modernisation of agriculture and industry. They will lead in the drive for social reforms and political democracy. Imperialist capital will prompt the national bourgeoisie to take an anti-imperialist stand against the alliance of landowning aristocracy and imperialist foreign interests. The national bourgeoisie will promote development through the diffusion of technology, capital, and enterprising spirit to the backward areas. Inevitably there will be a transition from traditionalism to modernism. (Chilcote & Edelstein 1974:53)

There is more than a hint of class interest in this fanciful and heavily ideological prognosis as it appeals to members of the national bourgeoisie itself and to US interests for obvious reasons but it is not a class analysis of the periphery as such. (Chilcote and Edelstein 1974:54).

The diffusionists viewed the problem of underdevelopment as a technical rather than a social or political problem. Their proposed solution, import substitution industrialisation (ISI), is a technical solution. ISI is a policy of protection in which governments in the periphery impose high levels of import duties and even prohibit the import of some types of manufactures. Governments assist domestic and foreign enterprises to set up new industries by expanding infrastructure to serve the industrial sector and to provide capital on special terms. The aim of ISI is to substitute domestic production for imports (Sundrum 1983:234). The irony of ISI was that it never really tackled the question of the role of the metropolitan bourgeoisie or its
relationship to the national bourgeoisie in the periphery and, far from threatening the imperialist forces in the periphery, it strengthened them by having the state act as an insurance broker and capital investor for the centre's projects in the periphery. ISI actually strengthened existing internal/external linkages. It was also a failure as a technical solution (Bienefeld 1982:46).

The diffusionists also failed to theorise the role of the state in the periphery or to develop a theory of the intersection between imperialism, class struggle and the state. They assumed that the state was a mere instrument and that the national bourgeoisie and its allies formally in control of the state would be able to determine the direction of state industrial policy. But the state is a complex network of class relations in which many different class interests can be registered. For a start, ISI led to an expansion of state activities both in allocation, where new infrastructural projects were required, and in production, where state capital often became the surrogate for a hampered national bourgeoisie (as in Tanzania). Expansion in allocation and production gave a central role to state managers (Block 1980) and, in the case of managers in the state production sector, a self-conscious subjective role. State managers favoured ISI long after its technical utility seemed suspect for ISI is technically simpler to decide on. In an ISI industry, Third World technocrats have before them a ready-made replica of a plant from an industrialised country, so their main concern will be that of short term implementation in local conditions rather than long term operation. The metropolitan bourgeoisie also has an interest in ISI apart from the supply of intermediate goods which they can register in the state and through the state if the industrialisation drive is effected primarily through project aid. Aid donors assessing projects on economic feasibility criteria are more likely to favour the establishment of an industrial project like a ready-made plant, which, appears capable of immediate results. The experience of ISI shows that the role of the state cannot be assumed nor can the political power of a class, in this case the national bourgeoisie, be considered purely at the formal level as diffusionists did.
The Dependency Proper Theorists and Class Analysis

The dependency proper theorists approach to class was to take up Baran's view that the periphery was dominated by the metropolitan bourgeoisie. When coupled to the metropolis-satellite chain of surplus appropriation this made the national bourgeoisie a dependent bourgeoisie. It meant that their role was seen as one which reinforced underdevelopment.

Tied to the dominant class interests and dependent on world imperialism for the manufacture of some goods, for foreign currency, and for foreign capital, the national bourgeoisie has no choice other than to accept its condition as a dependent bourgeoisie. The diffusion of capital and products to the backward zones results in economic stagnation and decapitalisation. This diffusion extends monopolies into the rural areas with negative consequences for balanced development as income becomes concentrated in a class of merchants and middlemen. (Chilcote & Edelstein 1974:53)

The analysis of the role of the national bourgeoisie was taken up by the diffusionists and the dependency proper theorists, by following the clas analysis of Baran. It proved to be a dead end. The debate over the role of the national bourgeoisie continues to be taken up today but, as the Kenya debate (below) shows it still tends to end in stalemate. It may be more productive to begin by deconstructing the analytical framework itself. The approach of the dependistas and, the errors they made in adopting Baran's analysis are evident in Frank's work. Frank makes at least three major errors in his class analysis. First, he uses class as a classificatory tool for social groups (as stratificationists would), rather than as a key to social change as in orthodox Marxism. Second, his analysis incorporates a rigid political determinism. He argues that the actions of classes are predetermined, hence that the domestic bourgeoisie - is comprador because, in representing its own interests it represents to a large extent the interests of foreign capital as well. Similarly, subordinate classes have a predetermined political path in the analysis for he argues that workers and peasants cannot resist politically except through social revolution. Third he locates exploitation not in the
capital-labour relation (and therefore at the site of class struggle) but in exchange relations as generated by the mechanisms of surplus appropriation between economic systems.

All of these problems arise as a result of the theoretical terrain which Frank is on in arguing that underdevelopment is caused by the exchange and transfer of surplus as it is appropriated from one level to another in the peripheral social formation. As it is surplus utilisation that determines social outcomes, Frank need only trace the course of surplus through the hierarchical chain of metropolis-satellite to understand the process of social change. In the process, he labels classes according to the role they play in the transfer of surplus. This results in a class analysis which includes class relations but includes them as residual analytical categories, lacking any real substance (Goodman & Redclift 1981:42-43).

The problem of political determinancy of class action in Frank's work is also related directly to the form that exploitation takes in the model, and especially to Frank's idea that metropolis-satellite relations are ordered hierarchically from one level to another. Classes in this conception must play a predetermined role otherwise the whole analytical framework will collapse. They are either exploited or exploit, depending on their position in the metropolis-satellite chain. The domestic bourgeoisie is comprador because it is exploited by the metropolitan bourgeoisie and it also assists in the exploitation of workers and peasants. Autonomous political action by the national bourgeoisie is not possible while it remains linked into the metropolis-satellite chain. This thesis, when coupled with the stagnationist thesis that the Third World could not develop, gave rise to the slogan 'the development of underdevelopment' and the argument that development and underdevelopment are two sides of the same coin, a reflection of the development of the capitalist system on a world scale.
Class and the Return to Marx

Frank's class determinancy thesis has been challenged by Marxists such as Leys (1978), who adopt the orthodox position that capitalism is progressivist, that development is occurring in the periphery and, most importantly in this context, that a national bourgeoisie is forming with a base in accumulation and a capacity for autonomous political action. The debate has been conducted in the context of Kenyan development. The debate is inconclusive for each side has continued to assert an established position. In simple terms it was argued on the dependency side that the national bourgeoisie could be reduced to an appendage of imperialist-dominated stagnation. On Leys' side it was argued that there were prospects of the domestic bourgeoisie's asserting itself in opposition to imperialism and thereby achieving some degree of 'real' capitalist development (Beckman 1981:5). Beckman is right to note that the empirical evidence is neither here nor there, that it does not in fact help resolve the debate. Beckman is correct to argue that beneath the empirical evidence there is a major theoretical point, although he is only partially right in seeing the debate as unresolved because both parties have misconstrued the nature of the contradictions in the relationship between imperialism and the national bourgeoisie.

It is true, as Beckman argues, that both parties assume there is no real capitalist development unless there is a national bourgeoisie, but what both parties assume beyond this is that they must settle in general terms the question of class determinism before they can understand the process of underdevelopment in the Third World. I hasten to point out that this problem became a focus of debate only because it was integral to Frank's hierarchical chain of exploitation. Thus it remains crucial only while the debate remains on Frank's theoretical terrain. If, however, Frank's framework of exploitation is not adopted, if the construction of an alternative framework shifts the debate on to a different theoretical terrain, then the question of the theoretical status of the relationship between imperialism and the national bourgeoisie may become residual rather than crucial.
Baran and the dependency theorists' class classification appears to bear some similarity to Marx's own division of capital into three types: industrial capital (productive enterprises including capitalist agricultural enterprises), financial capital (banks and similar capitalist enterprises dealing in money capital) and commercial capital or merchant capital, buying and selling goods rather than producing them (Reynolds 1981:83). Marx, however, took these various types of capital and the distinctive production, exchange and distribution spheres of which they were composed as proof of 'a structured whole, a totality in which production is determinant but the other spheres have a relative autonomy and each sphere has an effect on each other' (Fine and Harris 1979:6). Marx argued that exploitation depends less on the type of capital and more on the fact that in the sphere of production under capitalism, surplus value is expropriated from an exploited class. This difference is crucial in theoretical terms because class-divided societies are formed at the point of production through the process of exploitation.

The Leys side is correct to argue that this is a fundamental and non-negotiable axiom of class analysis. It is only through the process of realisation of surplus value in the production process that class locations can be uncovered. Classes are located in production. Classes either appropriate surplus value (exploiters) or have surplus labour appropriated (exploited). It is the struggle between these classes as they attempt to shift the boundaries of appropriation in their own favour which can properly be called class struggle. The Leys side know this but, in attempting to prove that the national bourgeoisie in the periphery are performing an historically progressive role, they tend to speak deterministically of the political processes related to boundary shifting. The Leys side also fail to show systematically how boundary shifts between classes inside the periphery can be affected by external factors.

The dependency side is certainly incorrect to neglect production when locating classes. By default, however, they have provided substantial support for the notion that class relations do exist outside the fundamental antagonisms embodied in the process of
production. They may have located and labelled their classes incorrectly, but they have shown that class relations exist between the metropolitan bourgeoisie and the national bourgeoisie in the process of distribution of the surplus. They have emphasised the external aspects of class relations which are missing in the Leys argument. However, like the Leys side, the early dependency analysis of this external aspect contained an element of political determinacy. Frank's hierarchical framework of exploitation led the early dependency analysis of class to assume that relations between the metropolitan bourgeoisie and the national bourgeoisie would be non-antagonistic. If we dispose of the Frank framework, we can argue that class relations at this level can be antagonistic. However, class antagonism at this level is not fundamental. Classes cannot be located on the basis of their role in the distribution of the surplus. Hence we cannot regard antagonism between metropolitan bourgeoisie and a national bourgeoisie as class struggle. It is instead class conflict.

Much of the problem of class analysis in the periphery stems from the reductionism that is evident in the Kenya debate on both sides. In its analysis of class relations, the Leys side tends to reduce class conflict over the distribution of the surplus to the level of class struggle. They see a progressive national bourgeoisie increasingly owning the means of production and appropriating surplus value from the providers of labour power. On the dependency side, the class struggle is reduced to the problem of class conflict, of relations between ruling groups over distribution of the surplus. But surplus is not traced back to production. Both sides make these reductions because they have a level-of-analysis problem embodied in their class analysis. They do not know how to deal with the connection between the internal analysis of class location (in production) and class relations (which can cross national boundaries).

Neither side in the Kenya debate adequately traces the influence on class fortunes of class relations (boundary siting and boundary shifting among classes) or the organisation of class power. For, as Samoff says, if class is a relationship then
'[T]he formation of classes embodies within it the organisation of power, much as political structures embody class conflict' (Samoff 1982:118). The class analyst whose concern is structures and change may well begin at the point of production but may soon find that the ultimate content of the means of production lies outside the peripheral social formation. A study of production and of the organisation of class power, that is, a study of the antagonisms that exist in production but which are realised through alliance building which can cross national boundaries (and alliance decay), enables the class analyst to overcome the level-of-analysis problem embodied in the Kenya debate. This does not mean that class antagonism is negated, much less taken outside the realm of production, for people within the peripheral social formation still organise themselves to contest for the ability to control the appropriation of surplus and expropriate surplus value where possible (Samoff 1982:118). However, a focus on production when accompanied by a concern with the organisation of class leads the class analysts to focus simultaneously on two levels. As Poulantzas says, 'On the one hand, their [classes'] very existence is affected by the concrete struggle that takes place within a social formation ... On the other hand, the classes of one social formation only exist in the context of the relations of this formation with other social formations' (Poulantzas in Samoff 1982:115). The class analyst must focus simultaneously on the relations between imperialism and peripheral classes (including the national bourgeoisie) as well as on classes formed at the point of production in the periphery, workers and peasants as well bourgeoisie and petty bourgeoisie, and the power by which their relations are mediated by the organisation of political power, the state.

In the remainder of this chapter, I attempt to develop a class analysis of this kind. I begin by returning to first principles of class analysis to show the connection between class location (in production) and class relations (objective and subjective) which have both an internal and external dimension. Needless to say, such an approach leads a great distance away from the simple problem of locating or labelling the national bourgeoisie in the periphery.
First Principles of Class Analysis

Samoff (1982) has attempted to rethink class from first principles with a view to analysing class in a way which includes both production and the organisation of power⁴ and allows the analytical framework to accommodate both internal and external levels. Of necessity the framework must be stated in general terms initially. Samoff writes

For use as an analytic construct, class must be understood as a relationship, in fact, two types of relationship simultaneously. On the one hand, class is defined by role in production, as production is organised at any particular moment. On the other hand, at the same time class is defined by opposition: classes exist only in opposition to other classes. That is, class is defined by both structure and process. Neither is adequate by itself. And both are, in historical terms, ephemeral. (Samoff 1982:112)

Samoff agrees with Wallerstein that 'classes do not have some permanent reality. Rather they are formed, they consolidate themselves, they disintegrate or disaggregate and they are re-formed. It is a process of constant movement, and the greatest barrier to understanding their action is reification.' (Wallerstein, quoted in Samoff 1982:112-113).

As a guide to research, Samoff's account is fairly abstract, so I take his notion of class structure (in production) and attempt to identify the precise nature of these structures, which I rename class location. Samoff's class process (in opposition) is also not specific enough; it does not show how the state has a role in constituting class antagonism as well as a role in reinforcing the dominance of certain classes and subordinating the interests of other classes. To this end I also unpack this concept, renaming it class relations (subjective and objective).

My unpacking of Samoff's guidelines for the study of class at the level of production relies on the conclusion of the previous section that, as a result of the fact that foreign capital enters the periphery in different form and type, accumulation in the periphery takes place wholly within disarticulated sectors. The
social formation is differentiated at the level of production according to the size, form and structure of the process of capital accumulation in each and can be designated monopoly (or more exactly oligopoly) capital, competitive capital and state capital sectors (Habermas 1976:34). Each of these sectors, according to the processes of production and exchange existing within a sector gives rise not only to an exploited and exploiting class but sometimes to fractions of these classes and often to intermediate social categories. It is at this level that we talk of class location.

The location of classes/fractions/social categories (class in itself) is established horizontally within sectors on traditional Marxist criteria. It is a reasonably simple matter of determining within a monopoly, competitive or state capital sector the range of classes generated by the ownership and control of the means of production. The outer limits of this range (i.e., in the private sectors the owners and non-owners) are not problematic, though rarely (if ever) is the range of classes/fractions/categories in any sector reduced to two polar opposites. An inquiry into the control of the means of production usually suggests the existence of intermediate categories and sometimes of fractions of the main classes. These are essentially what have elsewhere been referred to as contradictory class locations (Wright 1979). The theoretical significance of defining class location in this manner is that the rigour of Marx’s concept of exploitation has been maintained (based on production in each sector), yet the differentiation of the social formation into sectors means that there can exist a larger number of classes without the analyst’s feeling compelled to submerge them into a two-class structure.

However the identification of the amorphous locations of classes/fractions/categories tells us little about the organisation of power in the sector. To know this it is necessary to look also at the relations (class for itself) between classes/fractions/categories. These relations can be formulated in two moments. The first is the class relation (objective) by which antagonism between contending
classes/fractions/categories within a sector takes the form of the objective siting of the boundaries between these classes, fractions and social categories. Class location (i.e. ownership and control of the means of production) translates into class relations (objective) or objective boundary siting between classes mainly through market relations in capitalist society. The market or state structured exchange relation will be the main content of class relations (objective). The input of the state is also important in establishing boundaries. Important also is the history of boundary siting within that sector and the ethnic and cultural limitations and the actions of the state vis-a-vis any class/fraction/category involved in these boundary struggles. The second moment of the class relation can be called class relation (subjective) and this is the real moment of class conflict and class struggle, for in these circumstances classes are acting subjectively to expand their space and hence to shift boundaries in their favour and therefore to roll back the space of other classes and fractions.

The subjective (self-maximising and expansionary) actions of classes/fractions/social categories (including state managers in the state capital sector) are actualised in two main ways: 1) by forging alliances with other classes/fractions/social categories in the sector, and 2) by developing a coherent ideological strength which gives them the edge in dominance over other class/fractions/social categories in the sector. We will return to these concerns and especially to the role of the state in influencing boundary siting and boundary shifting as well as outlining the circumstances in which the state itself can act in a subjective manner in the next chapter where the full theoretical framework will be presented.

Class and the Articulation of Modes of Production Theorists

The above account of class location and class relation is highly generalised. I now examine previous attempts and suggested approaches to making the study of class location and class relation specific to the periphery. Class location in the periphery has been the focus of articulation-of-modes of
production theorists such as Meillassoux (1972) Terray (1972), Rey (1982), Hindess and Hirst (1975), Laclau (1971), Foster-Carter (1978) and Wolpe (1980) and Fitzpatrick (1980). The background to their position is Althusserianism and French Marxist anthropology but the position passed into underdevelopment theory via Laclau’s critique of Frank.

Laclau began with the charge that Frank’s work was not Marxist because it focussed largely on the utilisation of the surplus through exchange rather than the conditions of appropriation and thereby neglected the specific social relations of production under which the surplus is extracted. Frank’s approach conflates class relations with spatial relations and focusses more centrally on control over the exchange of the surplus than on labour exploitation and appropriation of surplus value. I have endorsed this view in relation to the Kenya debate but the difference between Laclau’s critique and that of Leys is that Laclau posits not only a contrary view of the role of the domestic bourgeoisie but an alternative conception of the production process in general. This is the articulation of modes of production thesis. Laclau argued that those who utilise surplus may not even be engaged in the exploitation of wage labour. He argued that it is only where free wage labour exists in conditions of generalised commodity production that the capitalist mode of production can be said to exist. Laclau concludes that it is precisely because this mode has not been extended throughout Third World social formations and because it is articulated with pre-capitalist modes of production that underdevelopment exists (Laclau 1971).

In its least functionalist form, for example, in Rey (1982) the articulation of modes of production analysis begins by arguing that a social formation contains more than one mode of production. The reproduction of the social formation requires that the conditions of reproduction of each mode be compatible. Modes of production are in dialectical unity such that there is the likelihood of one mode becoming dominant over time to eventually replace the other but this is a long process of transition, so long in fact that transition is the normal state
of affairs. During the time of transition both modes must be reproduced. A mode of production is dominant when it is able to reproduce itself. This means that the subordinate mode can be reproduced without there being any necessary connection between the forces and the relation of production of that mode and the laws of motion belonging to both modes.8

In outline, articulation of mode of production is highly abstract but its abstract criteria provide useful guidelines to the study of class in the periphery by introducing a degree of heterogeneity into the study of the class structure. The method for locating classes in articulation of mode of production theory is identical to the approach I have suggested, that is, classes are formed in production. The difference is that class locations are identified by articulation theorists wholly within a mode of production rather than within a sector of production as in my scheme. Alavi explains how to identify class location in articulation theory.

Recall that for each mode of production, such as the feudal mode or capitalist mode, Marxist theory recognises pairs of 'fundamental classes,' the class of exploited producers and the exploiting class, whose social relations of production are constitutive of that mode ... The interests of the two 'fundamental classes' in two modes of production in the same social formation are irreconcilable; the contradiction between the two is resolved only by structural change. Besides the 'fundamental classes,' Marxism also recognises the existence of 'auxiliary classes,' such as petty producers and traders, professional classes, and so on, whose structural significance is derived from their location vis-a-vis the dominant mode of production and their relationship to the fundamental classes, which are the rival contenders to be the ruling classes. (Alavi 1982:296-7).

Articulation of mode of production theory accommodates the existence of a wide range of classes in a social formation (exploiter, exploited and auxiliary classes in each mode) without at the same time losing the rigour of exploitation through the appropriation of surplus value. The theory does then propose very definite limits to the patterns of class domination, for
class locations are limited by the modes. By extension, there are limits to class relations and to the characteristics and compositions of class alliances.

Articulation of modes of production theory alerts us to the fact that capitalist commodity relations have not been generalised in the periphery and that, even where they do exist (where, for example petty producers of export crops own their own means of production), it is in a form peculiar to peripheral capitalism.\(^9\) It focussed attention back on the mass of people in the periphery, the peasantry, and elevates to prime importance the question of the nature of agrarian transition - the historical, theoretical and practical aspects of the process whereby the pre-capitalist economy is first disarticulated by colonialism and then incorporated back into peripheral capitalist networks and the subsequent paths of expansion of commodity relations. The idea of agrarian transition was virtually lost to underdevelopment theory when Frank first argued that capitalist class relations and the monopolistic 'metropolis-satellite structure' fully permeates even the most backward regions of the social formation pari passu with its integration in the capitalist world system (Goodman & Redcliff 1981:32).\(^{10}\)

However, the real problem with the interpretation of agrarian transition in articulation of modes of production is its inherent functionalism (present in the theory of interlocking modes itself) and its rigid insistence that capitalism exists only where wage labour exists. This functionalism is evident in Meillassoux (1972) at the level of production for he believes the basis of articulation is that the capitalist mode of production is unable to produce its own labour and therefore pre-capitalist relations fulfill a function for capital by reproducing labour.\(^{11}\) Meillassoux suggests that we should see a single system dominated by capital which preserves and manipulates pre-capitalist modes of production to its own benefit. This functionalism is carried through into the level of class relations where class, state and imperialism are also seen primarily in terms of their functional utility for capital in general.
Class Analysis and the Problem of Agrarian Transition

The theory of articulation and its insistence that wage labour is the sole defining characteristic of capitalism have been challenged by Banaji (1977) and Bernstein (1977, 1979, 1981). They aim to retain a focus on agrarian transition and the peasantry without retaining the functionalism inherent in articulation of modes of production theory. They are especially concerned to modify the functionalist prediction that the peasantry must be forever subsumed and subordinated to the abstract notion of capital in general. Banaji (1977) insists that the mode of production should be conceptualised at the level of social formation. He makes a distinction between relations of exploitation of labour in individual enterprises and the relations of production and laws of motion of that mode. He argues that articulation theorists have confused these two for, if capitalism is the dominant mode at the level of the social formation, then all production relations in that social formation are in essence capitalist even if the relations of exploitation of labour in individual enterprises or branches of the economy appear to be pre-capitalist. Bernstein (1977, 1979, 1981) makes the same point: where capitalism is dominant then articulation of modes of production does not exist.

Bernstein (1977) bases his argument on the process of reproduction in which the peasant household is the unit of production rather than a mode or class. He argues that commoditisation destroys the natural economy (based on use values) for commoditisation causes the withdrawal of labour from use value production, thereby undermining the material reproduction of the natural economy. Rural producers, through the process of monetisation, are at the same time forced into commodity production, the production of exchange value either directly through wage labour or through the production of cash crops. The reproduction cycle of the natural economy is gradually broken by the consumption of commodities and at the same time the production of commodities (or wage labour, temporary or permanent) enters the household reproduction cycle.
The advantage of focusing on reproduction, as Banaji and Bernstein do over articulation, is that the process of commoditisation can be given precise meaning at the level at which agrarian commodities are produced, in the peasant household. There is no need in reproduction analysis to assume that the processes through which production and reproduction take place, including the means whereby peasants receive inputs in order to produce, the manner by which peasant production is directed and controlled by dominant classes (including ideological precepts) and the role of the state throughout the production and reproduction process of the commodity, are functional for the social formation as a whole.

The major difference between articulation of modes of production and Banaji and Bernstein concerns whether peasant production should be regarded as a form of production subject to capitalist laws of motion (Banaji and Bernstein) or whether it should be regarded as a distinct mode of production (articulation theorists). The question is whether capitalism should be defined abstractly in terms of wage labour, in a way unrelated to the specific context in which it is to be applied, or whether abstract definitions should be made to fit, indeed should be drawn out of, empirical observations (out of the specificity of the peasantry in the Third World).

Bernstein's approach is specific to Third World peasantries (predominantly cash crop producers) and has the added advantages of retaining and synthesising previous views on agrarian transition and the peasantry. Bernstein has not neglected the great importance of the structural differences between the peasantry and dominant classes emphasised by articulation theorists. However he argues that the structural difference is not to be understood in terms of capitalists being engaged in the appropriation and realisation of surplus value and peasants being engaged in simple reproduction of simple commodity production, the object of which is to reproduce the producer and the unit of production, the household. Rather, peasants are engaged in capitalist commodity production, the object of which is also the realisation of surplus value, but with the important difference
that the unit in which commodity production takes place is the peasant household. Bernstein has thus managed to retain Frank's original insight that capitalism has penetrated to every level of the peripheral social formation without losing the specificity of agrarian reproduction as Frank did. Bernstein writes,

> The position taken is that peasants have to be located in the capitalist relations of production, but in conditions less determinate than those of the proletariat to the degree that household production is not subject to complete expropriation nor to the particular modes of regulations and discipline of labour exercised within the capitalist production process. (Bernstein 1979:437)

His analysis allows us to think of all those who produce commodities for cash in the competitive capital sector as capitalists, even though production is based on a different form of exploitation of labour, the household.

Bernstein's analysis also brings state and class relations to the fore of the analysis in a non-functionalist manner. The state is in focus initially because it is largely through state agencies that peasants receive payment for their crop. The price received by peasants is vital to Bernstein's analysis for he regards this price as the wage labour equivalent. It is a price which can be kept low and to a minimum because it merely has to be equal to the cost of reproduction of the household's labour power. The analysis is less functionalist even though the peasantry's location in a capitalist mode of production makes it dependent upon the price it receives from the state and ultimately dependent on the state of the industry itself and world commodity prices, etc. But the fact that production takes place in the household where conditions are less determinant than those for the proletariat means appropriation of surplus by the dominant class is more problematic. Here again the state plays a key role for it is largely through the agencies of the state (state control of input, state marketing, state credit, state price setting mechanism, export and other taxes) that surplus is appropriated and it is largely these state agencies which peasants attempt to resist.
My task in this thesis is not to prove or develop Bernstein’s analysis but, by building on the base of Bernstein’s work, to draw out the political processes which shape state/dominant class/peasant relations in the coffee industry in Papua New Guinea. Bernstein’s analysis provides the essential first step for locating classes in peripheral rural areas. To conclude this section, it can be repeated that the commendable feature of both Bernstein’s analysis of class locations in the periphery and that of the articulation of modes of production theorists is the recognition that the class structure is complex, that the whole range of classes has to be theorised, but that antagonism and class struggle must be understood at the level of production.

Class Location in the Periphery

The complex nature of the class structure, the range of classes and the fact that these must be understood at the level of production can be analysed in different sectors economy, monopoly capital sector, competitive capital sector and state capital sector. The existence of these sectors in the periphery is a direct result of the effects of the movement of different forms and types of international capital into the periphery which has linked sectors externally such that they do not contain their means of reproduction within the periphery and such that each sector is radically disarticulated from the others. Having designated the sectors and noted that fundamental classes emerge from the relations of exploitation in each sector it is possible to present a hypothetical picture of the range of classes extant in an ideal-type social formation. The scheme is tentative because classes are formed in struggle and therefore in historical circumstances. However, it is necessary to have some idea of the range of classes that might exist in order to explore in the next section some arguments about the process of class relations within the periphery. It is important to note at this stage that these are classes generated economically, which may or may not translate into dominant or dominated classes depending on class relations (objective and subjective) in the particular peripheral social formation. A generalised and tentative scheme for class location in the periphery may resemble the following:
Class Relations in the Periphery

There is no established way to analyse class relations, processes of domination, comparable to the analysis of class locations via the value form. However, it would seem to follow from what has already been shown that class relations are crucially affected by two major variables: (a) the nature of the linkage of a sector to the world market and (b) the role of the state. O'Donnell (1980) has shown how the linkage to the international market via the form and type of international capital affects the nature and role of the national bourgeoisie, if such a class exists at all. The following account of O'Donnell's argument only relates to the role of the metropolitan bourgeoisie in the monopoly capital sector (see above). However, it sets down the type of analysis for studying class relations that can be applied to empirical material.

O'Donnell begins with the observation that Third World countries become linked to the international market through a single or a few products which at different historical moments become interesting to the centre. Each product at a given stage of internationally available technology entails specific requirements and consequences in terms of the organisation of production (and the relations of production) or extraction. Some products can be handled by establishing a tenuous relationship with the local society; perhaps only the means of transportation to the port, the port itself and a police force for the control of labour are provided locally. Others, on the contrary, like

<table>
<thead>
<tr>
<th>Level</th>
<th>Sector</th>
<th>Segment</th>
<th>Exploiter Social Category</th>
<th>Exploited Social Category</th>
<th>Exploited</th>
<th>Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Monopoly</td>
<td>Exploiter</td>
<td>Metropolitan Bourgeoisie/National Bourgeoisie</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td>State Capital</td>
<td>Exploiter</td>
<td>Corporate Managers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td>Competitive</td>
<td>Exploiter</td>
<td>Organised Labour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exploiter</td>
<td>Upper Bureaucrats</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exploiter</td>
<td>Politicians</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exploited</td>
<td>Lower Bureaucrats</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social Category</td>
<td>Petty Bourgeoisie/Big Peasantry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exploited</td>
<td>Brokers, Middlemen/Middle Peasantry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social Category</td>
<td>Unorganised Labour/Poor Peasantry</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
the example of coffee in Papua New Guinea as will be outlined in Chapters 5 and 6, require a rather dense network of relationships with classes and groups.

Emphasis upon the historical moment is important not because the technology (productive forces) in the same industries in different social formations varies (it does not because capitalism which is based on competition between capitals requires all capitalists to adopt the highest level of technology in similar industries) but because changes in the relations of production can lag behind the development of the productive forces in a social formation. Under such circumstances production relations in different social formations might lead the same product to be produced within slightly different sets of relations of production. This difference can be evident in the different means by which quite different class relations are constituted by the state in similar industries in different social formations, e.g., roles for marketing boards, policies on development, approaches to export licensing, etc.

However, these different sets of class relations constituted through the state do not arise merely in the post colonial period. On the contrary, class relations in an industry which are constituted by the state are first constituted by the colonial state. In different social formations in the same industries it is evident that the different class relations constituted by the colonial state can either be maintained or reconstituted through the post-colonial state. Thus the role of the colonial state and colonial policy toward an industry becomes crucial as much of the post-colonial politics in that industry is based around the question of how changes in post-colonial state policy affects the internal and external classes extant in that industry. The colonial form of state, the role of metropolitan classes under colonialism and the conflict between them (colonial bureaucracy vs. colonial settlers), the place of the country in the world market and the manner by which commodity production in colonial times entered the household reproduction cycle, displacing the natural economy, all become of great importance to the way classes in post-colonial social formations are constituted by the state.
In the monopoly capital sector which is essentially the sector O’Donnell is analysing he shows how the defining point of a monopoly capitalist enterprise, the barriers to entry, determine the role of the national bourgeoisie, the way its constituted by the state and whether it exists at all. In some cases he reflects there were points in the cycle of the product where barriers to entry were so high that the local bourgeoisie or oligarchical groups were unable to control it (which supposes a particular role and resource availability of the state apparatus, since such limits were different depending on support, indifference or, quite frequently, hostility from a state apparatus profoundly penetrated by international capital). As Fernando Henrique Cardoso and Enzo Faletto have shown, an important feature was whether the main export product was directly exploited by a local class, which gave birth to a local bourgeoisie with its own base of capital accumulation in the domestic market and rapidly displaced the more comprador elements of its own class. This pattern was different from that, such as some plantations and most mining, where the natural resource was directly exploited by international capital, thus leaving very little economic space for the emergence of a local bourgeoisie. (O’Donnell 1980:724)

Even at this single segment of the monopoly capital sector, the question of development and underdevelopment is made more complex by the variations in the possible linkages of the monopoly sector to the international market through either the product itself, patterns of finance, etc. and by variations in the relations of production in the same industry across social formations and variations in the role of the state, colonial and post colonial, toward an industry. All of these factors effect the structure of classes in dominance in the post colonial state. The use of the state in overcoming barriers of entry to the monopoly sector by the dominant local class in this sector, the national bourgeoisie, is clearly crucial.

The development question clearly does not rest with a debate that only takes up the question of whether the national bourgeoisie has managed to seize the state or whether the state is siding with the metropolitan bourgeoisie, as the Kenya debate would have it. Stated this way the development problematic is radically
ahistorical and theoretically simplistic. Development can take many paths, as Beckman (1981) has argued, and may be able to take place where a national bourgeoisie does not exist at all. The mix of variables already outlined which influence the outcome in this one segment in one sector are repeated for every segment in the social formation. The overall outcome when all segments are understood and explained is of very different development paths for different social formations.

Class and State in the Periphery

The analysis of class location and class relations in a sector or industry in the periphery can be said to begin with an elaboration of the following four points: 1) class antagonism between fundamental classes at the point of production; 2) the extent to which international capital in a sector leaves economic space for dominant classes in that sector or industry; 3) the bases of accumulation of the local dominant classes and their capacity to appropriate surplus from subordinate classes, either directly at the point of production or through control of exchange mechanisms such as the market; 4) the role of the state, crucial in these development outcomes. The empirical chapters of the thesis reinforce the theoretical arguments already made, that to understand development and underdevelopment in terms of class relations, then many or all of the theorems that predict how classes and states affect development must be rejected. In particular, the heterogeneity of the class structure within the periphery suggests that state/class relations must be analysed segment by segment or industry by industry throughout the whole social formation. Attempts to apply pre-determined labels to classes, to generalise about the role of classes from an analysis of a single segment in the social formation, have failed. Due to limits of scope this thesis will not attempt to test these theoretical arguments in a whole social formation. Rather, one industry is chosen, the coffee industry in Papua New Guinea. The detailed treatment of state/class relations in one industry, which has both internal and external dimensions and a range of rural classes should test the adequacy of these theories to explain development and underdevelopment.
It should be clear by now that the development process proceeds through a tangle of complex state/class relations. All classes are engaged in conflict at all levels of the social formation and all aim to capture parts of the state as part of their armoury. However, the ability to capture parts of the state varies just as states vary, so, from the view of each class, the role of the state is certainly problematic. A class must gain what Alavi (1982) calls representation in the state and to do this the state must be open. The class may also attempt to establish alliances throughout the social formation to bring the state to its side. The problem of state is not, as Leys assumes, that of its role in constituting the hegemony of the dominant classes but rather the opposite, that the social formation is structurally disarticulated (into sectors), that class struggles are localised and diffused, that all classes have to try to attempt development where there exists no power bloc and no possibility of developing one. Again the state seems the only force in peripheral society capable of overcoming disarticulated for, as O'Donnell writes, 'the state apparatus (however weak and fragmented it may seem to an ethnocentric observer) appears as and actually is the only centri-petal force' (O'Donnell 1980:718).
Endnotes

1. The left liberal approach is exemplified in a Papua New Guinea context in the various writings of Ken Good and Mike Donaldson including *Development of Rural Capitalism in Papua New Guinea*, Occasional Paper No. 1. (Boroko: Institute of Papua New Guinea Studies, 1980)

2. Chilchote and Edelstein add it has also been a feature of orthodox Marxist analysis, particularly among Latin American communist parties. By using this conception (stripped of the acceptance of foreign penetration), the Communist parties have been able to justify policies of cooperating with the national bourgeoisies, following the hope that organised urban workers could help industrial capitalists to create capitalism and the conditions for social revolution. (Chilcote and Edelstein 1974:54)


4. We must always remember the point made by that most astute Marxist observer, Harvey (1982:450) that the capital/labour relation is merely the starting point for critical analysis.

5. I have thus achieved analytically the position others such as Ougaard (1982/3:397) have called for, namely that the class structure must be analysed in a more complex way in the periphery than in the centre, a result partly of the structural heterogeneity of peripheral economies. I do not however endorse the use of Althusserian language and concepts adopted by Ougaard.

6. The term 'moments' is not chosen lightly. It comes from mechanics and suggests an image of forces about a point which can be measured in their own right but nevertheless are collapsed into one movement which causes rotation about the point. Two moments are chosen to study class in the
periphery, for just as we have to differentiate the class structure to get close to the complex reality of peripheral society, so we have to differentiate the concept class to make it a useful analytical tool for such a study. Samoff makes the same point. He writes 'For understanding politics within a particular state over time, however, it is important to use class as a more differentiated concept.' (Samoff 1982:114)

7. The precise nature of the state's input at this point will be discussed in the next chapter.

8. Special thanks to Stephanie Fahey for help with the entire section on articulation of modes of production.

9. Ziemann and Lanzendorfer state the problem clearly

   Capitalist commodity relations have not been generalised - on the one hand there is the semblance of formal freedom and equality for all commodity owners which derives from the mystification inherent in capitalist production, on the other, the social integration by means of commodity and financial ramifications is incomplete. (Ziemann and Lanzendorfer 1977:148)

10. Mars makes the same point, though in connection with class relations rather than production in general. 'The second problem with the dependency model is that, despite its interest in the development of classes in the periphery, it is still rather vague about the particular role of the peasantry as an independent, political force.' (Mars 1981:100)

11. Functionalism is also evident in the critiques of Meillassoux from within the articulation of modes of production. For example, Bradby (1980), a most stringent critic, argues that articulation may not be a permanent or universal condition for the reproduction of capital. She also makes the good point that the 'needs' of reproduction are related not to the abstract notion of capital in general but to individual
capitals or branches of capital at particular times. Bradby also rebels against the idea of characterising pre-capitalist modes in an indiffereniated way and argues that their articulation with capitalism and individual capitals will be determined by the internal conditions these modes exhibit. However, even with these various qualifications, she still argues that pre-capitalist modes generally provide the exploitable labour for capital to be reproduced.

12. The classification of the peasantry into 'big' (or rich) peasants, 'middle' peasants and 'poor' peasants was first developed by Lenin and Mao and has received its most recent restatement by Bernstein (1979:431). According to Bernstein,

i) 'poor' peasants come to constitute a rural proletariat. Even though they have access to a small plot of land, they are unable to reproduce themselves through household production. The lack of enough land or other means of production or family labour forces the household to sell its labour power in order to reproduce itself. Access to a small plot does not make the household in essence peasants; it contributes to the household's subsistence, thus reducing the wage necessary.

ii) 'middle' peasants are able to reproduce themselves mainly through family labour and land. However, at critical periods in the agricultural cycle, they employ seasonal labour which is provided by 'poor' peasants in the same area or by migrants from other areas where commodity production is less developed and the pressures for simple reproduction are expressed in terms of a need for extra food and/or money.

iii) 'big' (or rich) peasants come to form a category of capitalist farmers. They are able to accumulate sufficient capital to invest in production through the purchase of superior means of production and/or labour power and therefore maintain a cycle of extended reproduction. A big peasant may not only operate as a commercial farmer employing labour power, but also act as a local merchant and rent out small-scale processing units.
This classification, and Bernstein's analysis, is very helpful in understanding the social processes which occur in a very complex sector, such as the competitive capital sector. In the thesis, the coffee industry in Papua New Guinea is studied as an example of the competitive capital sector. It is shown that many of the political changes which occur in this sector in Papua New Guinea are the result of class relations occurring in the competitive capital sector between the petty bourgeoisie and the big peasantry. These relations are quite difficult to uncover due to the overlap between these classes which Bernstein has noted. In general terms he has noted that serious limitations are set on the emergence of big peasants as large scale capitalist farmers by the state and by international capital. He argues that because the circuits of commodity production in Africa are so backward, capital accumulated by big peasants often has to be reinvested in mercantile and transport activities, normally the province of the petty bourgeoisie, because these areas yield a better rate of return than agriculture. Big peasants, he adds, expend their cycle of reproduction by entering commerce, thereby squeezing between international capital and direct producers or by occupational 'straddling' whereby some household members acquired wage or salary employment in better paid positions such as teaching, government and commerce. In Papua New Guinea it will be shown that in the coffee industry the space between international capital and direct production is a small one and that coffee politics is about the struggle between these two classes to occupy this space. The use of the state to maintain or extend control of this space is crucial to the fortunes of both classes.
APPENDIX C - THE STATE IN PERIPHERAL SOCIETY

State is a theoretical term, one associated with the great themes of political discourse and interwoven with political activity, simultaneously a part both of eloquently formulated intellectual constructions and of the working assumptions of political action. (Dyson 1980:3)

Introduction

Most attempts to explain the process of development and underdevelopment have led the analyst to the realisation that development theory must sooner or later attempt to deal with what Skocpol calls 'intersecting structures' (e.g., class structures, trade networks, state structures and geopolitical systems) involving varying and autonomous logics and different, though overlapping, historical times (Skocpol 1976:1087-1088). There is a need to know the precise theoretical and empirical relationship between these concepts, what classes benefit from the intersection, to what extent imperialism shapes the periphery, what the implications of this shaping for development are, how the state functions and what form it takes in the periphery. These problems are not easy ones to solve because a study of the intersection of imperialism, class and state is itself at the intersection of the two most difficult conceptual dichotomies in the social sciences: 1) the political and the economic, and 2) the internal and the external.

However, steps towards a resolution need urgently to be taken in the area of development and underdevelopment theory. Modernisation theory, with its strong political orientation, closely analysed the internal preconditions for development. It collapsed under the weight of the dependency critique. Dependency theory, heavily economistic, analysed the external determinants of development as they affected peripheral societies. In recent years, dependency has fragmented (some would say disintegrated) into the unsatisfactory functionalism of world systems theory, grossly externally oriented, and the articulation of modes of production theory, oriented to the exclusively internal problem of agrarian transition. The likely
outcome of the fragmentation in development theory is that the Third World will give up on theory, will fail to see its relevance to political action, and will fail to push on and build upon the rich heritage of theory developed in this area during the 1970s.

Imperialism, Class and the State

Bernstein and others have located the problem in the analytically difficult task of overcoming the internal/external dichotomy. Bernstein writes that there must be

an awareness of the need to transcend the more or less static dichotomy of 'internal' and 'external' factors shared by Warren and the dependency theorists despite their different conclusions. Within the framework of a theory of world economy the need to analyse any social formation in its specificity - as a complex ensemble of class relations and contradictions, of the economic, political and ideological conditions and forms of class struggle - is a political task of prime importance. (Bernstein 1982:231-232)

Most versions of dependency are formulated in a way that probably precludes the overcoming of the internal/external dichotomy. This is because dependency theory failed to deal with the heterogeneity in form and type of international capital which enters the periphery. Dependency theory tried to generalise about the role of international capital (as monopoly capital) and this led dependistas to assume that international capital structured states and classes in the periphery in a determinant manner. It is more likely, however, that variegated international capital has differential effects on states and classes in the periphery and is politically indeterminant overall. There can be no doubt that international capitalists in the periphery pursue their own interests, but their effect might be limited to the forging of state/class alliances on a fairly ad hoc, uncoordinated basis. The forging of alliances by international capital does not alter the fact that external intervention in the periphery structures the periphery in its own interests. However, the idea is obviously a modification of the more mechanistic versions of dependency. Perhaps dependency
could never have been more than this, given its vagueness and theoretical weakness. As Samoff quoting McDaniel writes, 'Dependency, like exploitation, is a relationship: and so it makes no sense to argue that "external factors" mechanically cause "internal factors"' (Samoff 1982:119). There are dangers for internal analysis of placing a heavy though functionalist emphasis on a theory of world economy, so there seem to be very good reasons for not focussing on the external dimension.

There are, however, very good reasons for focussing on theory building at the internal level. If class is understood according to the value form, i.e., classes are formed in production this in itself suggests that an understanding of class must be internally based,

since in the current situation the primary locus of production and, perhaps more important, the structures of the reproduction of capitalist relations are located within nation-states, it is likely that the major locus of class conflict will be within the nation-state. That is, class conflict is a phenomenon of concrete situations, which for most people are defined within nation-state boundaries. In these terms, the operation of the entire world system is reflected within the organisation and practices of individual nation-states. Hence, we need to understand class struggle as having a distinctly national form ... [It] requires that analysts work at a level of abstraction suitable to the study of nation-states, while at the same time not losing sight of the relationship between that level and other levels. (Samoff 1982:122)

The utility of class for the purpose of overcoming the internal/external dichotomy is that, while the primary locus of class may be internal, 'it is precisely because class analysis can comprehend the mechanics of productive relationships that span national boundaries that makes it so valuable a method of analysis' (Nursey-Bray n.d.:45).

Class is then the social topography that spans internal/external boundaries. Yet class has limited utility as the basis of a framework for understanding the intersection of imperialism, class and state. For a start, we have shown how it has been necessary to deconstruct class and classes to allow for the
formation and class relations of a very large number of classes and fractions. The complexity and variation in class structure introduces a heterogeneity into the analysis which would be difficult to theorise (let alone test) on its own terms. Second, class action is to be understood not in terms of presumed orientations (e.g., comprador, dependent, nationalist, populist) but in terms of contingent alliances formed in the heat of struggle, alliances which by definition have built into them their own dissolution. Were we to make class the focus of our theory building, then social action would be largely defined in terms of class alliances and class alliance dissolution. Such an approach leads to analysis at the level of truism as we find in Cardoso and Falleto (1979), for example.¹ Third, classes do not exist as mere locations, i.e., as exploiting and exploited classes, but classes exist in a complex ensemble of class relations. The realm of class relations is not autonomous, boundary siting as well as boundary shifting depend crucially on the state.

The state is important as it has itself an external and internal role and thus incorporates within itself a potential synthesis of these levels. The state also incorporates within itself the potential synthesis of the political and the economic. No economic realm exists apart from the state. International and internal flows of capital and other transactions are regulated and overseen by the state. The organisation of society, that is, classes in dominance as well as classes in resistance, is constituted through the state. The struggle is over control of the nation's accumulation process, a study embodied in domestic society and social practices which are constituted within and by the state (see Andrews 1982:149 for more on this). The question is, as Beckman so succinctly put it,

What kind of state is this? Presumably it is a capitalist state, but how can we understand its pre-eminence in the context of the development of capitalism? More specifically, how can we understand its role in the relationship between capitalist development locally and on a world scale? How does it structure the relation between domestic and international capital? State capital itself, how does it enter this relation? What are the consequences for accumulation and class formation? (Beckman 1982:38)
The seminal work in the field of the study of the peripheral state is Alavi (1972). Alavi attempted to provide theoretical answers, which could be tested empirically, to three puzzling, though commonplace, statements about state/society relations in the periphery. The first is that it is commonplace now to argue that radical theory cannot work with a model that suggests the state is merely a committee of the bourgeoisie, that the role of the state and the interests of the dominant classes can be conflated. Second, it is commonplace to recognise that in peripheral societies the class structure is a complex one, that fractions of the metropolitan bourgeoisie, fractions of the local and petty bourgeoisie and even big and middle peasant fractions may, under certain circumstances, exercise influence in the state. Further, it is generally recognised that access to and influence over the state in peripheral society is a crucial determinant of class fortunes and that class struggle takes place not in a realm outside the state but, due to the centrality of the state, class struggle is constituted inside the state apparatus itself (Leys 1975:46).

Alavi’s response to these observations is to argue that the state in peripheral society is ‘relatively autonomous’ because, under metropolitan patronage, the state is not simply the instrument of the three competing propertied classes, the metropolitan bourgeoisie, the indigenous bourgeoisie and the landed classes (Alavi 1972:60-62). Alavi recognises the centrality of the state, calling it ‘overdeveloped’, largely because its basis lies in the metropolitan structure itself. He writes,

the post-colonial society inherits that overdeveloped apparatus of state and its institutionalised practices through which the operations of the indigenous social classes are regulated and controlled. (Alavi 1972:61)

Alavi’s (1972) work is seminal because his analysis attempts to satisfy two demanding (from a critical perspective) requirements. First, it stayed relatively close, but not too close, to the orthodox Marxist view of the state as a committee of the bourgeoisie by arguing that the peripheral state was relatively autonomous from the dominant classes, i.e., it does
not secure the direct interests of any dominant class. This is close to the orthodox view because relative autonomy theory can still conceive of a connection between dominant class and state power by recognising that relative autonomy in the state is functional for capital. Second, it managed to place the theory of the peripheral state within the framework of dependency by arguing the peripheral state was an 'over-developed type of state'. Alavi argued that the locus of the peripheral state was the metropolitan centre; the peripheral state had been shaped and structured to this purpose, and 'the "superstructure" in the colony is therefore "over-developed" in relation to the "structure" in the colony for, its basis lies in the metropolitan structure itself, from which it is later separated at the time of independence' (Alavi 1972:61).

There are however three serious criticisms of Alavi's work which when accepted cause the two main pillars of his delicate framework to come tumbling down. The first is that the state appears in Alavi's theory in an undifferentiated form, as a monolith, which is largely outside the field of class struggle and which is either captured or, in this case, not captured by a class or an alliance of dominant class fractions. Thus the point that class struggle can take place inside the state is largely ignored. Much of my theorising is aimed precisely at explaining the class struggle both inside and outside the state and the effect class struggle has on the way the state functions.

The second is the charge by Block (1977:9) that the concept of relative autonomy is reductionist and simply a more sophisticated version of instrumentalism. Relative autonomy is unsatisfactory at the level of general theory for, as Parkin (1979:129) has shown, the relative autonomy approach leads to analyses in which an attempt to distinguish one type of state from another is based simply on the degree to which it departs from the pure Bonapartist model. Analyses of this kind do deal with the specificity of the political but tend to treat the complex interrelationship between state and class in a static way. Alavi, for example, tends to analyse the relationship between the three propertied classes and the state as though it were frozen
in place by the colonial experience. It is this type of sterility, inherent in the relative autonomy approach, which led Jessop to reject it on the grounds that it did not give a clue to political action nor a clue to how the economic actually makes its impact upon the political (Jessop 1977).

The third criticism is that the notion of an overdeveloped state is not tenable. Leys (1975:43) noted, that it is a misconception of the state for it began with the structure of the state and not class struggle and, empirically, peripheral states are not more overdeveloped than centre states. Ziemann and Lanzendorfer have argued that the question of whether the state is overdeveloped is meaningless, for 'as long as a state is fitted for its main function, to secure societal reproduction, the extent of its influence on society is neither too great nor too small (Ziemann and Lanzendorfer 1977:145).

Alavi is correct to attempt to understand the intersection of imperialism, class and state by focussing on the peripheral state. Alavi has shown how the development of a theoretical framework of the state can be the starting point for an analysis of the intersecting structures of class, state and imperialism. Alavi is certainly correct to try to explain development in terms of the connection between dominant class and state power and to emphasise the limits to power imposed by a condition of dependency. However, the concepts of 'relative autonomy' and 'the over-developed state' do not survive rigorous scrutiny, much less perform the empirical and analytical functions Alavi assigns them in his framework.

A further failure in Alavi's early work was that he did not realise that he had to deconstruct the state in class terms and not along the state's own lines, not, that is, into sections of the state apparatus such as the bureaucratic military oligarachy, politicians and political parties. This is the basis of Leys' criticism.

It is really that this whole way of approaching the question of the significance of any state, of starting out from its structure or scope, whether inherited from
Leys' criticism is correct but one must be careful not to follow him to the point where the debate swings back in the other direction, back to a functionalist Marxism in which classes are analysed at the level of production and politics and the state are regarded as derivative. Beckman has noted how in the course of a return to a Marxist-oriented anti-dependency stand spearheaded by Leys, 'theory is largely disarmed of its potential for providing scientific support for the ongoing revolutionary struggles of the oppressed people of the Third World' (Beckman 1980:60).

The most important work done on this intersection since Alavi is that of Beckman (1980, 1981, 1982). Beckman himself has not yet devised a detailed framework for studying the intersection but his acute critiques of current debates and observations of Nigerian underdevelopment contain within them the direction theory-building must take. Beckman has set down very clearly what are the limitations of current debates. In particular, Beckman endorses Alavi's notion that the state is the starting point. He notes that 'we need to go back to the substantive political content of the underdevelopment position' (Beckman 1981:10). Beckman's contribution has been to devise the idea of the state as an organ of capital in general.

It is a state of imperialism: imperialist social relations of production have been domesticated and the state itself is the very linch-pin around which the system of imperialist domination rotates. This is a new phase of imperialist domination: imperialist domination from within, with its specific contradictions, and its specific form of resistance. Provisionally, we may call this state 'the state of internationally subordinated state monopoly capitalism' (One thousand Units of Account to the one who invents the best short name for this hydra!). It is international in the domination of production for the world market, in its integration into production and class formation (and class alliances) at that level. It takes a subordinated position in the wider system. State capital and state intervention perform strategic functions in organising production, class formation and class alliances. The essence of its
form of domination is monopolistic: state power is used
to generate conditions for monopoly profits, including
the suppression of anti-monopoly social and political...
forces. (Beckman 1982:50)

Commendably, Beckman wants to stay on the terrain of dependency
and he is correct to note the importance of a state capital
sector and to emphasise the form and function of the state, but
he is mistaken to follow the orthodox analyses of the dependistas
in attempting to generalise about the form and type of
international capital - monopoly capital - entering the
periphery. Beckman thus returns to the old radical preoccupation
with monopoly capitalism. He adds to this an orthodox approach
to dependency. Monopoly capitalism and Orthodox dependency taken
together become a real barrier to theoretical development.

In this way Beckman’s best insights on the state are in danger of
being buried. In particular he earlier postulated a
differentiation within the state that is not based on the state’s
own institutions. He wrote ‘the capitalist state is not above
sectional contradictions’ (Beckman 1982:45), but in the name of
monopoly capital immediately closes off this line of inquiry.
‘Still, its mode of functioning and the role of such sectional
influences can only be understood if we assume the unity of
capital vis-à-vis social forces which are opposed to it’ (Beckman
1982:45). But this is not at all the case in disarticulated
social formations and the reason Beckman understands it this way
is because he starts from the premise of monopoly capitalism.
Beckman has emphasised the importance of form and function of the
state but again a monopoly capitalist perspective added to
orthodox dependency closes off this line of enquiry. The state’s
function is presented in such general terms that it is
meaningless, and also seems to be firmly based on
base/superstructure which is how Beckman sees it as he writes,
‘The crux of the matter is of course the logic of the interaction
between the two: the dialectical relationship between base and
superstructure’ (Beckman 1982:38). The bases of this function are
clear in accumulation, but not where they matter most, i.e., in
the state apparatus. The form of the state presented by Beckman
is simplistic in the extreme. The form of the state can hardly
be monopolistic when it constitutes within itself numerous and diverse class struggles and class conflicts, when it contains within itself a plethora of institutions of all types when it is divided into a state capital sector and a state allocative apparatus.

My own framework for studying the intersection of imperialism, class and state builds upon the work of Alavi and Beckman. My framework, like theirs, begins with a conceptual framework of the state. My problem, like theirs, is to develop a framework which will help me to explain underdevelopment not only as a result of the limits imposed on state power and class power by a condition of dependency but also as a result of the connection between dominant class and state power. This connection is itself shaped, but not determined, by imperialism. I wish to remain on the terrain of dependency but I have no wish to generalise about the effects of international capital if this is to lead me, as it does Beckman, to treat state and class in the periphery in a determinant manner. I wish to analyse state class relations in the periphery without slipping into an instrumental view of the role of the state or failing to deal adequately with the diversity and complexity of political action as Alavi's early work does.

The conceptual framework of the state which I present in the remainder of this chapter attempts to remain on the terrain of dependency theory, for I argue that the principal effect of international capital on the periphery is to create a disarticulated peripheral economy and polity. International capital disarticulates the peripheral economy into three main sectors of production, monopoly capital, state capital and competitive capital sectors. The peripheral state has been structured differentially around the existence of these sectors of production so that state/class relations take place mainly at the sectoral level. The class struggle in the periphery is constituted by the state (Alavi 1982) at the sectoral level. For this reason, the state cannot be differentiated solely in terms of its institutional divisions, as Alavi does in his early work, nor solely in terms of class struggle, as Leys seems to suggest.
Rather the task is to differentiate the state in a way that informs the complex reality of a dependency condition and state/class relations at sectoral or industry level.

The solution is to follow Beckman and show how differentiation within the state is expressed in the form and function of the state at sectoral or industry level. I argue that the connection between dominant class power and state power is mediated through differentiated forms of the one state. The function of the differentiated state is an empirical question. Generalisation about the function of the differentiated state is not attempted for obvious reasons, but here I do generalise about the bases of a state's functioning. I develop the concepts of functional autonomy and political penetration to outline the bases upon which a differentiated state functions. I proceed by proposing an ideal form of the state and argue that the extent to which the capitalist state approaches its ideal form - liberal, partisan and Bonapartist at different sectoral levels - in turn allows for the possibility of functional autonomy within the state apparatus. This determines the degree to which the state facilitates penetration of international capital and other dominant classes down through the social formation. Penetration may or may not be functional for development, for this depends exclusively on the type and form of international capital present in the country, the class structure, and their intersection with the state.

State and Social Formation - Reconceptualising Base and Superstructure

I begin the elaboration of the generalised framework for studying the state and the social formation by noting the differences between it and the orthodox Marxist base/superstructure model. This helps theoretically to situate the framework in relation to the more familiar Marxist formulation as well as to differentiate it from Alavi's notion of relative autonomy as the solution to the base/superstructure problem. The study of the state from a Marxist perspective is, and has always been, simultaneously the study of the apparatus of political authority (or power) and the
patterns of social interaction in their manifold complexity which we try to capture in the term society. It is no longer possible to focus primarily on society, as Marx did, or on the state, as later Marxists have attempted to do. Rather it is apparent that Marxists and others must begin to grapple with the reality that society and state are interpenetrated in a very complex manner in the modern world. The notion of symbiosis, a relationship in which initially dissimilar entities exist together in mutual dependence and for mutual benefit, each making up for the shortcomings of the other, highlights, however schematically, the degree of interpenetration evident between society and state. I assume in presenting the framework that many of the traditional tools of the Marxist trade, in particular the base-superstructure metaphor, require modification if this symbiosis between society and state is to be satisfactorily uncovered. I agree with Poulantzas that there is everything to be gained from not using the base-superstructure metaphor as a model of social relations at the level of the social formation (the macro-level in Marxist parlance) (Poulantzas 1980:16). I begin by suggesting an alternative to the base/superstructure metaphor for a study of a social formation and go on to develop a detailed conceptual framework which can be used to uncover the symbiotic relationship between society and the state in a generalised social formation.

To reject theoretically the base/superstructure metaphor at the macro-level it is necessary to put something in its place and this can be done if it is realised that the rigid 'economic determinism' which is present theoretically in the base/superstructure model is there not only because the base is the economy (and not the polity or ideology), but also because the model obeys a vertical logic such that its upper storeys cannot exist except insofar as they stand upon the base. The various attempts to loosen up the determinism of the metaphor, to argue that the base and the superstructure represent an organic totality in which base and superstructure interpenetrate, fall foul of this vertical logic for ultimately they must identify the constituent parts of the base and when this is done it is obvious they everything else in the social formation depends upon it. The only way to overcome theoretically this degree of
determinism, it seems, is to shift the primary site of the logic of Marxist theoretical constructs from a vertical to a horizontal plane. The vertical logic of the base-superstructure metaphor must, I argue, give way to the horizontal logic of the centre/periphery model. The centre-periphery model which I advocate is not in its logic unlike the familiar spatial use of the model, though for my purposes it does not delineate spatial entities but is a tool for identifying relationships between concepts. A centre/periphery model allows the theorist to imagine the interpenetration of the various concepts, the mutual dependence of them - in short their symbiosis - without at the same time implicitly predetermining these relationships. The centre is not logically prime to the periphery but merely different. If we can imagine the symbiosis between society and state as essentially an horizontal relationship, it is possible to get closer to the essential nature of this relationship as it is formulated in the bulk of Marx's work. We may, however, need to be reminded that it was Engels, not Marx, who spoke of the economy as being ultimately determinant. While it is true that Marx sometimes used the term 'determinism' in reference to the relationship between society and state, he also thought of it as a correspondence, a reflection, a condition and an outgrowth (Rader 1979:10-14).

How then is the social formation structured if its logic operates primarily on an horizontal plane? First, it must be clear that the centre is the site of what is generally thought of as the state allocative apparatus. At the centre are the legal mechanisms, the various administrative branches and semi-government authorities, the police and army, etc. The task of the state's allocative apparatus is to set down, regulate and maintain a suitable social framework. Education, social services and local government, are all allocative mechanisms which are not themselves directly involved in the process of accumulation, but which function to ensure that accumulation in the periphery can take place. The state's allocative mechanisms do not directly obey a market logic but are engaged in the authoritative allocation of resources as dictated by political practice.
The state's allocative apparatus is not homogeneous, however, for it must be differentiated, not essentially in terms of its separate institutions, but according to the reality that different institutions within the state's allocative apparatus are in symbiotic relationship with different peripheries of the social formation. Peripheries are differentiated according to the size, form and structure of the process of capital accumulation in each and can be designated monopoly (or more exactly oligopoly) capital, competitive capital and state capital sectors. Each of these sectors, according to the processes of production and exchange existing within the sector, gives rise not only to an exploited and exploiting class but sometimes to fractions of these classes and often to intermediate social categories. The precise character of these classes/fractions/categories generated economically within a sector at any one time is an empirical question and must be left undetermined analytically. However, these classes/fractions/categories are symbiotically related, on a horizontal plane, to a corresponding part of the state's allocative apparatus and it is the outcome of this relationship (between the state's allocative apparatus and contending economic classes) which is the kernel of the specificity of the political in a sector. For it is this relationship which determines the form and shape of contending political classes (dominant and dominated classes), the extent of political influence which fractions of these contending classes might have, and which social categories, if any, will have political influence in a sector.

Now while the prime logic of a social formation might be accepted to be horizontal it must be recognised that each interpenetrated centre and periphery is not an atomistic unit unrelated to other such units. Indeed there is a sense in which we can uncover both a formal and informal vertical structure of a social formation. The formal vertical structure is derived very simply from the process of capital accumulation which establishes a hierarchy or rank ordering of sectors in terms of the amount of surplus generated by each sector. By this criterion the monopoly capital sector usually ranks first, the state capital sector is generally second and the competitive capital sector is third. This
vertical hierarchy between sectors is naturally also reflected in the functional and dysfunctional operations of the state's allocative apparatus whose hierarchy of branches usually reflects the hierarchy of sectors. The informal sense in which the social formation is vertically structured relates to the formation of alliances between classes/fractions/social categories from different sectors. Such alliances are usually responses to problems as they emerge and appear on the agenda, that is conjunctural crisis, and usually do not last, although they can be very important at the time and in their effects. Curiously, there seems to be absolutely no limit to combinations or permutations of alliances which can take place on a vertical plane because antagonistic classes have their locations established horizontally (within a sector) and a vertical alliance of apparently antagonistic classes does not threaten the existence of either class. Thus the important point remains that while vertically there is a structure, structures present in the horizontal plane of a social formation are logically prime.

Differentiated Forms of State Within the One Capitalist State

The social structure of a capitalist social formation is based on different sectors of production and exchange of commodities, that is on processes of material life, and it is a state's role to protect this social structure. It is now a well accepted argument, first articulated by Marx, that capitalism left to its own devices would destroy the social formation. Those who accumulate capital can identify and pursue their narrow interests as capitalists, but in general they are not able to identify and maintain the conditions needed to reproduce the social order in its entirety in the face of changing circumstances (Block 1977). So the state's allocative branches emerge with the initial aim of securing the minimal conditions necessary for accumulation to take place, i.e., that accumulators have access to labour, protection of property, etc. In order to fulfill this very general function, to prevent disintegration or to maintain the existing unity of the structure, the state's allocative apparatus has a very unique but general feature. It has a monopoly over the means of coercion within the social formation. This is an
important power but a difficult one to understand in terms of its impact upon the structure. The exercise of coercion has an impact upon the unity of the social formation in both horizontal and vertical planes. In the vertical plane, a hierarchy is established within the state's allocative apparatus on the bases of the varying degrees of coercion used in relation to different peripheries. This allocative hierarchy parallels to some extent the hierarchy of sectors as determined by the varying amounts of surplus accumulated by each. Together, these two hierarchies establish the vertical unity of the social formation. The difficulty in understanding this vertical unity is that it is itself built up of the various different forms which the symbiotic relationship between state and society take, relationships which are themselves principally horizontal ones. This is why it can be said that the monopoly of coercion is a factor in both the vertical and horizontal unity of the social formation.

In order then to understand how one might study the unity of the social formation established upon the fact that the state allocative apparatus has a monopoly of coercive power it can be hypothesised that within the state allocative apparatus the relevant state branch will exercise its coercive power in a different form. The form of the state would depend on the nature of the class struggle taking place within a sector. A general hypothesis might be that the various forms of state in the various sectors would be ranked hierarchically according to the degree of coercion present. With this general hypothesis in mind it seems possible to delineate a tentative account of the form state allocative power is likely to take in relation to each sector. Before proceeding, it is probably important to note that the form taken by the various state allocative branches in each case should not be considered in a rigid manner, for the actions of the state always have a series of unintended consequences which continually upset form and structure both within the apparatus and within a sector as a whole. The form the state allocative apparatus takes should not be considered as fixed but as a point around which the various state actions can be traced. There is no sense in which the state's allocative apparatus can properly perform or complete its designated task.
The monopoly capital sector is at the top of the sectoral hierarchy because it is usually highly productive, generating substantial surpluses for use in the state allocative sector and forging backward and forward linkages of importance to both the state capital and the competitive capital sectors. The monopoly sector also generates the dominant class, the bourgeoisie, which stands at the commanding heights of the social structure. We can hypothesise that the allocative branches in symbiotic relationship with this sector will take a liberal form. They will aim, by administrative decree, to ensure the existence of a suitable rational-legal framework within which the stability of class relations and the regularity of capital accumulation can take place.

The state capital sector generally does not generate large surpluses and usually does not forge many backward or forward linkages, though its function can sometimes be crucial to the whole social formation. Politicians have a great influence over this sector but because they do not draw their livelihood from the operation of the sector the nature of their influence cannot be hypothesised and is an empirical question. The state's allocative branches which are in symbiotic relationship with this sector tend to be ambivalent toward this sector. Partly, as noted earlier, this is due to the bureaucratic contradictions generated within the bureaucracy between state allocative and state capital wings of the state, but generally it is because the state capital sector rarely attains a self-sustaining momentum and is often in a state of crisis. Crisis in the state capital sector affects the state allocative branches for the cost to state revenues of a failing state capital sector can be exorbitant. Where this is the usual condition of the state capital sector the state allocative branches in symbiotic relationship with it are simply forced to take up this sector's cause and relate to it in partisan form. A partisan form of state allocative action can lead it to move against other classes/fractions/social categories in order to protect the sector and its managers. Within the sector lower bureaucrats and opposition politicians are structurally blocked from input to the
sector and outside the sector classes/fractions/social categories in lower sectors such as the competitive capital sector can be squeezed to favour the state capital sector.

The competitive capital sector itself is generally self-sustaining but it generates very small surpluses and often has problems ensuring its own reproduction. This sector is often thought to be parasitic or the sectors above it, but in fact it is often a sector where many innovations in production and exchange are developed which eventually find their way into the other sectors. This sector is also an important employer of labour and should be an important political constituency. However, the state's allocative branches in symbiotic relationship with this sector generally deal with it in an ad hoc manner. In form we can characterise these relations as taking the form of transitive relations and a Bonapartist form of state for the state allocative branches seem genuinely to believe this sector is in transition, though to what is never clear. The state's form is Bonapartist in the classic manner for in this sector the state is always transcendent over the fractions of capital generated by production in this sector. It is perhaps for this reason that class fractions in this sector show the strongest ideological resistance to close links with the state. Consequently the relation is an unstable one, often in crisis, and physical coercion of all the classes/fractions/social categories generated by this sector is not uncommon. A study of this sector suggests the broad hypothesis that the form of the state becomes less liberal (in the sense that allocative branches become more overtly coercive or more obviously neglectful) the further one moves down the sectoral hierarchy (Malecki 1981).

Alavi viewed the state and the social formation from the base and saw correctly a non-correspondence of state power and class power. He argued that this was due to the fact that the state was relatively autonomous of the three propertied classes. In Alavi's view this relative autonomy was functional for the dominant classes and for capital in general (Alavi 1972:60). But when viewed horizontally it becomes evident that the reason the state is relatively autonomous is that the state and the social
formation are disarticulated into sectors at the material level and that each sector has potentially a quite different form of state. The advantage of uncovering this more specific explanation for relative autonomy is that the explanation is rooted in the material base but is not dependent on general 'functional for capital' arguments. Relative autonomy of the state is therefore a structural feature of the capitalist mode of production but a feature capable of varying with changes in the material base from one social formation to another. Relative autonomy is not a simple reflection of the material base because it also depends on the extent to which the potential differentiation in the forms of the state within the one capitalist state is realised. In this way the problem of the reemergence of instrumentalism present in Alavi's concept of relative autonomy can be overcome.

State Constitution of Class Struggle and Class Conflict

In the previous chapter, the concept of class was discussed in some detail and the concepts of class location and class relatns (objective and subjective) were introduced. In that chapter it was shown that the state is a factor in boundary siting and boundary shifting at the level of class relations (subjective) by definition. While the state was shown to be important, the study of class relations was not related specifically to the detailed framework presented so far in this chapter. Thus the implications for class relations of conceiving of state and social formation as based upon disarticulated sectors which have the potential to realise differentiated state forms was not clear. This will now be shown, particularly: 1) how the process of capital accumulation in symbiosis with the state's allocative apparatus creates a class structure which is contained at sectoral level but antagonistic nevertheless; 2) how subjective action by all classes - there is no power bloc - takes place according to the state's form through the process of alliance building and ideological development; and 3) how contradictions between state and class action manifest themselves in a sector.
While the monopoly of coercion in the state’s allocative apparatus is important in establishing and maintaining the unity of the social formation in both vertical and horizontal planes, when we focus on the horizontal plane only, it becomes clear that the integration of a sector is also crucially related to the process of capital accumulation itself. This is so because, as will be recalled, a horizontal sector is structured on the symbiotic relationship between the form taken by the state’s allocative apparatus and the relations of production and exchange in society. Class relations (the site of class struggle) are affected equally by the form of state and by the relations of production. The fragile coexistence which exists between classes within each sector under normal circumstances is assured equally by the role of the state’s allocative apparatus and also by the fact that the process of accumulation in each sector has never generated merely two classes/fractions/social categories per sector. In all these sectors, monopoly capital, state capital, and competitive capital, not only are more than two classes/fractions/social categories generated but the symbiotic relationship of the class struggle to the state allocative apparatus has meant that the rationality of the capitalist state emerges out of a threesided relationship between state managers, and dominant and dominated classes. This political relationship in turn emerges out of a three-sided relationship generated by the accumulation process in which exploiting and exploited classes are themselves mediated by the generation of social categories or class fractions.

It is important to stress at this point that the existence of mediating fractions or social categories should not be considered as altering the basic antagonism which exists between exploiting and exploited classes in the accumulation process or between dominant and dominated classes at the level of class relations (where the influence of the state’s allocative apparatus is also under consideration). This is easiest to show for the process of accumulation, for antagonism is endemic to the capital/labour relation in that sellers of labour power have to struggle in order to sustain and improve the conditions under which labour is sold. This is the essential characteristic of labour. Conflict
can of course take many diverse forms including absenteeism, sabotage, slowdown, and collective industrial action. The existence of a mediating social category or fraction in the accumulation process may diffuse but can never alter this basic antagonism. Of course, when we bring the form of the state's allocative apparatus into the equation we see that conflict between what are now dominant and dominated classes can be more overt in certain sectors than in others. State managers, as the mediating category in this case, may control mechanisms which diffuse to some extent the overt conflict between these classes (as in the monopoly capital sector, if the hypothesis is correct) but again the basic antagonism is not altered.

The subjective (i.e., self-maximising and expansionary) actions of classes/fractions/social categories (including state managers in the state capital sector) are actualised in two main ways: 1) by forging alliances with other classes/fractions/social categories in the sector; and 2) by developing a coherent ideological strength which gives them the edge in dominance over other classes/fractions/social categories in the sector.

Alliance within a sector can be established in order both to influence boundary siting and also to shift boundaries in favour of one of the aligned classes/fractions/social categories where this shift does not affect the fortunes of the other aligned class/fraction/social category. Thus it would not be surprising to observe a dominated class and an intermediate social category joining forces to thwart attempts by the state's allocative apparatus to maintain boundaries which favoured a dominant class. However the important difference between alliances within a sector and those discussed earlier for the vertical plane is that alliances between dominant and dominated classes can never take place within sectors. It is notable however that the level of actual overt conflict or estrangement between dominant and dominated classes will vary from sector to sector. In the monopoly sector, for example, the exploiting class will require a steady and stable labour force and the state's allocative apparatus will ensure an evenhandedness and regularity in relations between dominant and dominated classes. In the competitive capital sector on the one hand, relations between these two classes may be bitter indeed.
Subjective action can also be facilitated by the creation of a binding ideology for a class, fraction or social category. The meaning of ideology which I adopt for the purposes of this framework is restricted to social practices which fulfill the following conditions: 1) that embodied within such a practice is a concealment of the causes, nature and consequences of that practice or some other practice; 2) that this concealment is in the interests of one or more of the dominant social forces within that society. In this usage, ideology is an interest-based philosophy of a social group around which the group can mobilise. It is necessary to mention at this point that the idea of a dominant ideology or hegemony suggests a vertical ideological integration which in this model would be considered a conjunctural phenomenon, not a structural one. Ideological integration of this type where dominant classes in all sectors are linked and where subordinate classes in all sectors consent to existing patterns does occur in times of acute conjunctural crisis (in times of national upheaval such as war, decolonisation) but this is rare.

Finally, we will look at an example of the types of contradictions that arise given the symbiosis between class and state elaborated in the framework. The contradictions are most acute when the state's allocative apparatus is in symbiosis with the state productive sector. However the state's allocative apparatus has problems of its own because, as a result of the differentiation of the state into the sectors, there is no necessary similarity between the state's allocative institutions as a whole at any given time, for each allocative institution exists in relation to a sector and within that sector each is an actual part of a distinctive class struggle. In other words class struggles within every sector give rise to a distinctive set of political and economic contradictions which provide the dynamic element in the sector. To illustrate these points we can refer to a characteristic state capital sector. This is an interesting sector for it is the sector in which state personnel are actively engaged in accumulation through either production and/or exchange processes. The difficulty is that the state capital sector is also in symbiotic relationship with the state's
allocative apparatus, the non-accumulative wing of the state. Managers of the state capital sector are not easily distinguishable from managers of its allocative branches and in fact quite often the same bureaucrats are engaged simultaneously in both areas of state activity. Thus while the state’s involvement in accumulation compels the state capital sector to obey the logic of the market, the confusion existing between allocative state managers compels it to obey also the logic of political practice. Political practice is even more to the fore when it is realised that politicians, a social category with great influence over any state activity, can intervene substantially in both the state allocative apparatus and the state capital sector. The result is that the state capital sector is generally beset by the most acute contradictions which economically propels it in one direction while politically propelling it in another.

Function of the State

It ought to be clear that the conceptual framework of the state outlined so far is primarily a structural one. The function of the state is more problematic. I agree with the critical sociologists that the state functions to prevent the disintegration of the social formation (Habermas 1979:180). However, it would be quite incorrect to attempt to be more specific on the function of the state without the analysis being empirically grounded. This is so because, as I have shown, both the state’s allocative apparatus and the state capital sector operate in the context of classes, fractions and social categories struggling to maintain their material conditions of life. The state does not develop autonomously but in the context of class struggle. Thus we cannot be sure, as functionalist explanations of the state assume, that either the state allocative apparatus or the state capital sector will automatically develop its form or change its policy in response to the needs of the overarching capitalist structure. In fact, it is very likely that some aspects of the state may be dysfunctional to the system as a whole. This is why I suggest that a thorough study of the functions of the state can only be
attempted empirically. What can be done, however, is to identify the channels through which the function of the state is exercised and provide some criteria for comparing state function across social formations.

The question of the state’s function is a question of the role of the state’s institutions. In asking questions about institutions we must apply to the ensemble of state institutions the same degree of heterogeneity and differentiation that we have already applied to the state’s role in the social formation as a whole. Frankel, talking of advanced social formation, notes that critical analysis has tended to neglect the study of the state institutions and to overstate the degree of homogeneity in these institutions.

The orthodox Marxist preoccupation with private capitalist production has tended to leave analysis of varying state structures, voting systems and statutory bodies to bourgeois political scientists. One does not have to be an American pluralist or ‘pressure group theorist’ in order to acknowledge that heterogeneity of state institutions so long neglected by Left-wing analysts. One of the traditions in radical analysis exemplifying this neglect is epitomised in America by C.W. Mills, and recently, in reference to the transnational corporate development of the EEC by Mandel and Poulantzas; it tends to treat legislatures and state institutions as bi-partisan rubber stamps for monopoly capital (despite the existence of ‘fractions’), thus ignoring the tremendous veto and countervailing power of non-monopoly capitalists and workers via local, regional and national state administrators, politicians and organisations which espouse the latter’s interest. (Frankel 1983:94).

This neglect of institutions has been even greater when dealing with the peripheral state. As O’Donnell notes, ‘very little has been done in terms of comparative studies of the state apparatus in Third World countries, furthermore, to my knowledge, very few country studies have devoted specific attention to the subject’ (O’Donnell 1980:717). It is only in Alavi’s recent work (1982:291), Beckman’s work and the present work that critique is beginning to focus on the impact of differentiation within the state upon the functions of the state.
It is necessary then to recognise that there exists a potential autonomy between functional institutions within the state apparatus - what will be called functional autonomy - and that this degree of functional autonomy vitally affects the chances of dominant classes in bringing the state to function in their interests. Alavi has expressed this clearly:

It is also of the utmost importance for all the dominant classes in the peripheral capitalist societies to be represented in the state apparatus and to press their demands, for which purpose they establish viable modes of class representation in the state. These take a variety of forms: political parties, independent class organisations, formal representation within the state apparatus on committees etc., as well as factions within the state apparatus established by virtue of the class origins and/or class affiliation and commitments of members of the bureaucracy and the military (Alavi 1982:296).

Ziemann and Lanzendorfer (1977:149), in true structuralist fashion, would disagree strongly with Alavi’s final point. They would deny that the class origins of those within the state bureaucracy have anything at all to do with the way the state functions or the role played by those within the state bureaucracy. But if the class origins of the bureaucracy are not relevant to the role played by those within the state bureaucracy by what criteria can state bureaucrats be indentified as a class? Or is it even plausible to conceive of state bureaucracies in class terms? Much time has been wasted in attempting to make global statements on such questions. Ziemann and Lanzendorfer make the point that the characterisation of the state bureaucracy depends upon a correct evaluation of state autonomy in each state. Taking up this point it can be developed by adding it to Leys’ observation that it is probably important when trying to determine the class character of the state bureaucracy ‘to distinguish between both levels and branches of the apparatus’ (Leys 1975:44). In the context of my framework the separation of the state into allocative and productive arms can be utilised to analyse bureaucrats as such. Leys argues, correctly, that bureaucrats in state productive sectors are class-like actors. State managers of the state capital sector (upper bureaucrats) tend to try to take on the role of self maximisers in response to
market criteria. State managers begin to act as entrepreneurs, engage dominant classes from other sectors in competition and seek to expand the state capital sector. The bureaucrats in the state allocative apparatus are however, much more difficult to categorise. Again Leys provides the manner by which this question can be answered. He writes, 'The first question must always be which class is dominant in a given social formation, since this dominance must be enforced by the state; the class character of the state's given by this relationship.' (Leys 1975:44). If we recast this point by asking which class is dominant in a given sector and add from Samoff (1982) that classes are formed in opposition, we might be able to identify under what particular circumstances bureaucrats in the allocative branches begin to act in class like fashion.

The problem is that opposition in this case cannot be identified on the basis of the law of value for it is not opposition formed in the process of exploitation. It may be, however, that different criteria could be used in this case. It may be that the bureaucrats in the state's allocative branches are formed into a class (in opposition) when there is limited functional autonomy in the state apparatus and when the dominant class in the sector has formed itself into a concrete and organised force such as a party which has gained class-like representation within the state apparatus itself. This would certainly apply to the Tanzanian case where a dominant class has formed a very rigid party structure which has reduced the functional autonomy in the state and created a conflict between government administration and the party within almost all of the state institutions in Tanzania at local, regional and national levels. The opposite is the case in Papua New Guinea where the state has a very high degree of functional autonomy, state bureaucrats are dispersed through a range of institutions at a range of levels which are fairly autonomous, and there exists no organised party of the dominant class which has penetrated the state apparatus. In this case we could say the state bureaucrats in the allocative branches do not form a class.
Heterogeneity within the state is one aspect of the function of the state. Functional autonomy exists within the state apparatus. An analysis of functional autonomy will uncover the extent to which different classes, mainly dominant but sometimes subordinate classes, can gain representation in a branch of the state and use that branch or institution to make demands over and against other branches and institutions within the state apparatus. The function of the state is also determined by what is sometimes called the strength of the state. The strength of the state or the political penetration of the state is a consideration of the extent to which the state as a whole can exercise control over the whole social formation. Political penetration uncovers a) the extent to which the political-administrative-juridical centre of the new state 1) establishes an effective and authoritative central presence throughout its geographical and sectoral peripheries, and 2) acquires a capacity for the extraction and mobilisation of resources to implement ...policies and pursue its goals,’ (Coleman 1977:3) and b) the extent to which the centralised power of the state has made it possible for the dominant class (from the monopoly capital sector, usually) to register its demands throughout all branches and institutions within the state hierarchy and down through every sector and also into all pockets and corners of the entire social formation. These two aspects of political penetration follow because,

the 'centre' in a new state is the locus of 'state power' exercised through the 'state apparatus' by the 'state bureaucracy' ultimately controlled and directed by a 'ruling group'. Thus, political penetration is that process by which the most influential and powerful actors – the penetrators – in the ruling group and state bureaucracy use state power and the state apparatus both to maximise state sovereignty and to pursue the ideal and material interests both of themselves and ideally of the society over which they exercise control. (Coleman 1977:8).
The relationship between functional autonomy and political penetration can be shown as follows:

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>FUNCTIONAL AUTONOMY</th>
<th>POLITICAL PENETRATION</th>
<th>STATE FORM</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONOPOLY</td>
<td>+</td>
<td>+</td>
<td>LIBERAL</td>
</tr>
<tr>
<td>STATE</td>
<td>-</td>
<td>+</td>
<td>PARTISAN</td>
</tr>
<tr>
<td>COMPETITIVE</td>
<td>+</td>
<td>-</td>
<td>BONAPARTIST</td>
</tr>
</tbody>
</table>

+ = HIGH  
- = LOW

The diagram represents the 'ideal' situation for 'dominant' classes generated by each sector. For example, the dominant class in a monopoly capital sector would prefer that it have a high level of penetration through the social formation and that there be a high degree of functional autonomy such that other classes in the social formation cannot capture the state to use (via nationalism for example) against the metropolitan bourgeoisie. The dominant class in the state capital sector, the upper bureaucrats in the state enterprises, would prefer also to have a high degree of political penetration through the social formation but would prefer a very low degree of functional autonomy in the state. This is because the bureaucrats in state enterprise are constantly engaged in a struggle with the allocative bureaucrats and planners of the treasury and other branches. The bureaucrats in the state enterprises can better demand 'partisan' treatment if the state's policy is planned in a unified manner and state allocation centralised. The dominant classes in the competitive capital sector would prefer little political penetration because they are not the dominant class throughout the social formation, they are the penetrated, not the penetrators. However, they would prefer a large degree of functional autonomy in the state for their best hope of advancement lies in the capturing and holding of branches and agencies in the state.
Legitimation crises are a crucial aspect of the function of the state and in their most critical form are the result of disruption in the system of functional autonomy coupled with a collapse of political penetration. It can occur that, despite the existence of the various forms of symbiotic relationship in each sector, the social formation begins to disintegrate. Disintegration is most immediately a crisis for the state's allocative apparatus, for it is this apparatus which is specifically charged with preventing disintegration. Thus when disintegration begins to occur we most readily think of it as a crisis of legitimacy for the state. However, legitimacy crises differ in degrees and some crises can be so severe as to threaten an entire sector. Such a crisis is acute for it calls into question not the management of the state's allocative arrangements but the actual material basis upon which social life is organised.

A legitimacy crisis can take two main forms - conjunctural and structural (Offe 1981:127). The first is a legitimacy crisis in the vertical plane which is caused by a conjunctural crisis of some kind. Conjunctural crisis can be very serious, as in the threat of war or the collapse of an established vertical alliance between certain classes which, though not crucial to the social formation as a whole, may become well established within the state's allocative apparatus. In both these cases what is at stake, however, is how effective state managers are at overcoming the crisis. The second is a more serious legitimacy crisis, for this occurs in the horizontal plane and is caused by a structural crisis of some kind. Structural crises can threaten the existence of the whole social formation for they occur when a sector begins to disintegrate, threatening immediately all the classes/fractions/social categories in the sector. The state's allocative apparatus and state managers can no longer differentiate between or within sectors. Dominant classes in both monopoly and competitive capital sectors are endangered both by decline in accumulation and by the inertia within the state's allocative apparatus. All dominated classes are suddenly in the same structural situation, for the inertia in the state means that well organised labour in the monopoly sector is suddenly
treated in the same unfavourable manner as labour in the competitive capital sector has always been treated. A structural legitimacy crisis creates the potential for a vertical alliance between all the dominant or all the dominated classes with the aim of fundamentally altering the social relations of production. The structural legitimacy crisis thus creates the preconditions for a period of social revolution.

Political Analysis and the State

The nature of political activity occurring in a social formation with the above structural characteristics is determined by the manner in which the social structure and the class struggle are interrelated. To analyse this political activity it is necessary initially to identify the location of classes/fractions and social categories in a sector. It is then necessary to chart the patterns of class alliances or class relations both within each sector and between sectors, that is vertically and horizontally. The capacity to forge alliances in either plane rests initially on the ability of a class to overcome internal fragmentation. The logic of class struggle suggests that it is in the first instance a struggle over the very existence of organised classes before it is a struggle between organised classes. Both the ability to overcome internal fragmentation and the ability to organise an alliance with other classes/fractions/social categories is dependent not on the structural characteristics of the class struggle within a sector.

In the horizontal plane, the same structural characteristics determine both the degree of internal coherence possible within a class/fraction/social category and also the ability of the class/fraction/social category to form and maintain alliances. These structural characteristics are of two types. The first is that which is determined by the production process, that is, the productive forces, the relations of production and the contradiction between them. The accumulation process itself creates the preconditions upon which dominant classes are advantaged in terms of internal coherence and the ability to forge class alliances and by which dominated classes are retarded.
on both of these criteria. Each class/fraction/social category as generated at the level of production acts as a structural limit upon the expansion of other classes/fractions/social categories. The limit is a dynamic one in the sense that it is constantly altered in relation to the amount of surplus generated by the sector. The question to be considered here is the obvious one of how a class/fraction/social category is advantaged or disadvantaged by the ongoing process of accumulation. This is a question of the location of the class/fraction/social category.

The capacity of a class/fraction/social category is not however, determined by the production process alone. For the form taken by the state’s allocative apparatus in relation to a particular sector will also determine the potential for cohesion and mobilisation structurally available to a class/fraction/social category; that is, the form taken by the state’s allocative apparatus can advance or retard the limits imposed upon classes in the accumulation process. The managers of the state’s allocative apparatus do not structurally favour the dominant class in each sector though in response to other structural imperatives this is often the effect of their activity. As the form taken by the state’s allocative apparatus is important for both aspects of the class struggle (internal cohesion and outside alliance) it follows also that the precise nature, of the institutions through which this form is exercised is also important to the outcome of class struggle within sectors.

While class is undoubtedly the most important cleavage within a sector, the importance of the state’s allocative institutions may operate to mask or conceal basic class struggle. Institutions can diffuse class struggle if they are constructed upon regional, race or other criteria and it is obvious that when this occurs alliances will need to bend to accommodate institutional structures if they are to be socially effective. In all this discussion of politics within a sector it must be continually borne in mind that there is an ultimate limit to alliances within a sector in that dominant and dominated classes can rarely align.
Political activity in the vertical plane is much less predictable for there is no logical limit to the patterns of alliances which can be forged. These alliances are usually a response to conjunctural crises and so their nature depends very much upon the empirical circumstances in which the crisis arises. It is very rare, however, for there to be alliances forged between dominant or dominated classes from every sector. Usually alliances extend vertically only between two sectors. Thus this framework does not take seriously the possibility of a continuously existing power bloc between dominant classes in all sectors under the leadership of the hegemonic class. Instead, it is proposed that for long periods of time there may be no power bloc established at all, merely a number of politically dominant classes, one to each sector, classes which display no particular organisation, unity or policy. The establishment of a power bloc is always problematic.

Conclusion

The conceptual framework for studying the symbiotic relationship between the state and society which I have outlined draws on a large corpus of recent Marxist conceptions of the capitalist state, though it would likely be regarded as heretical by many Marxists. My theoretical rejection of the base/superstructure metaphor at the macro level might, it could be argued, lead to a neglect of the role of the economy in social practice. This is a criticism which has been levelled, with justification, at others such as E.P. Thompson who, in rejecting the base/superstructure metaphor, have lost sight of structural factors altogether and have shifted the focus of social analysis to the subjective interaction of individual actors. By replacing the base/superstructure metaphor with an alternative structural model I avoid the neglect of structures, and by drawing the social structure from sectors based on the size, form and nature of capital accumulation I retain the centrality of the economy in my analysis. Althusserians will object to my frequent suggestions that many of the functions of the state can only be uncovered empirically, and to my argument that in certain circumstances the state has not only a relative autonomy but a potential autonomy
as well. However these critics ought to note that I continually insist that both in its allocative and state capital forms the state is always to be understood in the context of class struggle.

This framework is designed as a tool for studying the role of the state in an existing social formation. Thus it aims to be not only theoretically sound and coherent but also to suggest ways in which empirical phenomena can be organised, analysed and evaluated. This framework can be judged theoretically, in terms of its logic and/or its correspondence with the large paradigm to which it addresses itself. The framework can also be judged empirically, in terms of adequacy in circumscribing the subject under study in a manner that accords with empirical reality while at the same time allowing the greatest possible leeway for coping with the complexity and unpredictability of social reality.
Endnotes

1. Cardoso and Faletto are guilty of this in my opinion for nothing they say about the internal/external problem of class analysis in the periphery goes beyond what is implied in the terms themselves. Consider, for example, the following,

We conceive the relationship between external and internal forces as forming a complex whole whose structured links are not based on mere external forms of exploitation and coercion, but are rooted in coincidences of interests between local dominant classes and international ones, and, on the other side, are challenged by local dominated groups and classes. (Cardoso and Faletto 1979:XVI)

2. In Habermas own words, 'The political subsystem takes on the task of protecting society from disintegration.' (Habermas 1979:180)


4. Alavi writes that we might examine '... the state not as a homogeneous and monolithic entity but as a differentiated one, within which we may discover more than one locus of power.' (Alavi 1982:291)

5. The country to be analysed in the course of this thesis – Papua New Guinea – has quite defined levels of local, regional and national administrative systems. Papua New Guinea has a competitive electoral system and hence contains factors which Frankel (1983:103) regards as having the potentiality to increase heterogeneity within the State.

6. Leys (1975) would add that 'The officials entering the 'state enterprise' branch are especially exposed to the bourgeois values embodied in the technology, management practices, 'efficiency' ideology, etc. of the firms they take over, especially as they are dependent on the former management for advice and are thrust into a ready-made class position vis a vis the workers. (Leys 1975:43-48)
Why do Importers join ICA's

There is much evidence in Chapter Two to suggest that the argument that importer countries joined the international coffee agreement for reasons of altruism is implausible. It would seem that the US in particular, may have joined the ICA because it was in the economic interests of the large roasters and soluble manufacturers in the US (though not traders and consumers) and that this factor was at least as important as foreign policy concerns. But how could it be in the interests of US roasters to join the ICA when most economists would have been advising them that the effect of the ICA would be biased in favour of higher prices? Why did roasters show little concern for the fact that the green bean - their raw material - would rise in price? In theory, Marx has shown how an increase in the price of raw material would reduce the rate of profit. He writes, that,

Should the price of raw material fall by an amount = d, then \( \frac{s}{c'} \), or \( \frac{s}{c + v'} \), becomes \( \frac{s}{c - d} \) or \( \frac{s}{(c-d)+v} \). Thus, the rate of profit rises. Conversely, if the price of raw material rises, then \( \frac{s}{c'} \), or \( \frac{s}{c+v'} \), becomes \( \frac{s}{c+d'} \) or \( \frac{s}{(c+d)+v} \), and the rate of profit falls. Other conditions being equal, the rate of profit, therefore, falls and rises inversely to the price of raw material. This shows, among other things, how important the low price of raw material is for industrial countries, even if fluctuations in the price of raw materials are not accompanied by variations in the sales sphere of the product, and thus quite aside from the relation of demand to supply. (Marx 1959:106-107)

However, this proposition may require modification when commodification is considered less as a simple equation and more as a social relation. For raw materials exist not only to be turned into profit but also to enter the production process as constant capital (means of production) which is then coupled with
variable capital (labour power) to produce the commodity. The commodity is a product to be sold in a market place for consumption. It is not the commodity itself but the labour power expended in its production which gives the commodity value. Labour power is purchased in a labour market by a capitalist who pays the socially necessary price for labour power for the right to use labour in the production process. In this process the capitalist earns the right to put labour power to work for a period much longer than that required to provide for the reproduction of that labour power. This excess labour time, or surplus labour, is appropriated by the capitalist through its embodiment in the commodity form in the process of production. This process is summarised in the formula:

\[
\begin{align*}
L \\
M \quad C \\
\ldots \quad P \\
\ldots \quad C^1 \\
\ldots \quad M^1 \\
MP
\end{align*}
\]

where \( M \) — money, \( C \) — commodity, \( L \) = labour power, \( P \) = production, \( MP \) = the means of production. The formula for the circuit of capital can be shortened into its general form: \( M \rightarrow C \rightarrow M^1 \) which is the general or characteristic form of the circuit of capital.

Marx outlines the implications for social relations of this characteristic form of the circuit of capital in *Capital* — Volume 1. He writes,

Now let us examine the circuit \( M-C-M \) a little closer ...

In the first phase, \( M-C \), or the purchase, the money is changed into a commodity. In the second phase, \( C-M \), or the sale, the commodity is changed back again into money. (Marx 1954:146)

But as Marx says it would be pointless to engage in the activity \( M-C-M \) or buying in order to sell if the intention were to exchange by this means two equal sums of money e.g., $100 for $100. In fact as Kay writes in his explanation of Marx’s economics:

buying in order to sell can have no other purpose than accumulation which is by nature a continuous and endless process since the acquisition of one sum of money is
only the point of departure for the acquisition of more, hence the circuit M-C-M defines a process of accumulation which resolves itself into a pursuit of pure quantity (wealth in the abstract) which can set no limits upon itself. (Kay 1979:28)

Accumulation is a social process. It is the object of capitalist production. This object is realised through the appropriation of surplus labour is the unpaid labour time or that part of labour power which lies in between the socially necessary price paid to labourers and the value of labour power embodied in the final commodity. Surplus value is the source of the capitalists profit. The important point for our present discussion is that the appropriation of surplus value occurs primarily in the M-C phase of the characteristic form of the circuit of capital. This is the phase that received much attention from Marx. It is the phase Marx was concentrating on in the earlier section on the effect a rise in raw materials would have on profits. However our present problem concerns profit, not necessarily the realisation of surplus value and it need to be recognised that an impact on profit can be generated at the selling stage also, i.e., the C-M phase. The impact on profit in this phase depends precisely on the market structure in which the sellers of commodities sell. To say C-M can affect profit is not to say value can be generated solely in the act of exchange as against production but simply to argue that profit is not completely the same thing as surplus value (see Kay 1979:93 for an explanation of the difference between surplus value and profit).

We are now in a position to understand why it is that large US roasters could wish to join an ICA even though they were advised that the price of their raw material (the green coffee bean) might rise and thus reduce their profits. It must be remembered that the large roasters are oligopolists who control the marketing of roasted coffee at the wholesale level in the United States. The size and structure of the oligopolists is a crucial feature of the ability to control markets as Baran and Sweezy (1966) make perfectly clear. The importance of these two features became clear at the time of the USA joining the ICA for the only position which arose from within the USA to the ICA came
from the only roaster that was individually owned. The roaster, Hills Brothers was also the smallest of the six large US roasters (Krasner 1973:511). The large roasters control the C-M phase of the coffee chain for the oligopolist structure protects them to some extent from market forces. Monopoly or oligopoly control of markets is a situation very different from competitive capitalism for under competitive capitalism the enterprise is a 'price taker' while in an oligopolistic market the big corporation is a 'price maker'. By price maker it is meant that big corporations can and do choose what prices to charge for their products (Baran and Sweezy 1966:66). Because they are price makers big corporations can offset the losses to profit incurred in the M-C phase by having to buy raw materials at high price by setting their own high prices in the C-M phase. If it is correct in fact as outlined above in theory that oligopolistic roasters in the US can maintain profits in a situation where ICA's might be biased towards high prices for the raw material then the main objection roasters might have to the ICA drops away.
Rural Proletarianisation

The intensity of labour and the sheer volume of labour employed on coffee plantations raises the question as to whether rural proletarianisation is occurring as a result of capitalist plantation agriculture in coffee. The knee-jerk reaction of the Marxist social scientist (e.g., Good 1979) would be to argue that proletarianisation is occurring and will continue to develop as capitalism is extended. It would be pointed out that workers in plantation agriculture share the experience of exploitation, they work under conditions that approximate factory agriculture, receive uniform rates of pay, etc. This marxist argument would incorporate an addition to the effect that class action by rural proletarians is either hindered by false consciousness (ethnicity, kinship) which takes precedence over proletarianisation or, in a more sophisticated version, that the reality of ethnic and gender concerns allied with state intervention through the Highlands Labour Scheme (West 1958) or the minimum wage act to disorganise the rural proletariat against the well organised white planter class. The argument is that the working class exists and is conserved at the level of class location (in production) but is dissolved at the level of class relations (in opposition).

This argument has had to contend with the orthodox argument on wage labour in Papua New Guinea (Hewlett 1973 and 1980), which marxist ‘articulation’ theorists (Fitzpatrick 1980) also seem to endorse, that plantation labour is only partly proletarianised because its reproduction is dependent only partly on wage labour and mainly on non-wage subsidies derived from the village and subsistence agriculture. The claim in the orthodox view that rural proletarianisation is limited leads to the question of whether, and to what extent, plantation labourers do/do not depend on the wage for their reproduction. The orthodox scholars are concerned with the way in which this question might uncover the factors that influence the life chances of rural proletarians.
In Papua New Guinea the debate about the life chances of rural proletarians has been dominant in the official literature because of its bearing upon the question of what minimum wage would ensure that rural wage labour is reproduced. Reports on rural wage labour such as the Cochrane Report (Territory of Papua New Guinea 1970) and the Isaac Report (Territory of Papua and New Guinea 1970) and the 1971 Native Employment (Minimum Conditions) Ordinance were crucial in producing a more receptive attitude to the eventual growth of a permanent rural work force [and] as a result of these reports rural wages were increased and a minimum wages tribunal established. (Howlett 1980:203-204)

The reports and the resulting wage rises established, at least in principle, that there were limits to the extent to which the reproduction of wage labour could be subsidised by the village. These limits exist, as Howlett shows, even when rural wage earners are not permanent and alternate between the village and wage labour because many are functionally landless in that their land is economically disadvantaged by environmental or locational conditions which prevent them from earning a cash income. (Howlett 1980:195)

It is important to note at this point that official reports and legislation in the late colonial period began to recognise the growth of a permanent rural proletariat and to recognise that the life chances of rural wage earners do depend as much upon the level of the wage as on village subsistence.

Most of the academic writing on rural proletarianisation, marxist (Mortimer 1975, Good 1979) and non-marxist (Gerritsen 1981, Howlett 1973 and 1980) is caught in a contradiction which is well expressed by Howlett.

Given the embryonic stage of rural proletarianisation, it is perhaps too early to decide whether a significant rural proletariat will eventually emerge in Papua New Guinea, or whether present trends are simply leading to further differentiation of the peasantry. (Howlett 1980:208)
The reason given for this confusion by Marxists is usually that rural proletarians in Papua New Guinea are not 'conscious', they do not organise. The exist, in other words, at the level of class location but they disappear at the level of class relations. How can this be explained? What processes are dissolving the class action of this class? Is the class merely in formation? Is ethnicity, region etc. disorganising the class at the level of social relations.

I argue that in the case of the coffee industry in Papua New Guinea – and perhaps in the coffee industry of other countries – the dissolution of the class of rural proletarians takes place at the level of class location in production rather than, as is usually assumed, that disorganisation takes place at the level of class relations. It can be shown that the same production processes that create a need for wage labour, and therefore for the exchange of labour power might also, in certain industries, contain processes which dissolve that wage labour as a class or a collectivity. A twin, seemingly contradictory, process is going on. This is that a rural wage labour force is being established and at the same time this labour force is being dissolved as a class in the production process. Among the factors which cause this dissolution are the plantation form of production, the nature of plantation work and the method of engagement of plantation labour. By far the most important factor causing the dissolution of the labour force as a class at the level of production is the nature of plantation work and particularly the fact that on coffee plantations the division of labour on plantations is ascribed. It is not based on achievement or worker skills.

Pruning is the only paid labour task on a plantation which requires a modicum of skill. The highly labour intensive activities of weeding and harvesting require little skill. In harvesting trials, for example,

those who picked well were not capable of being distinguished by any age group, experience or other similarity. (New Guinea Highlands Bulletin, April 1965)
Skills in harvesting or weeding are not developed nor necessarily preserved or retained by the employer. The division of labour is not based on acquired skills. It thus becomes impossible to draw a boundary around a collectivity of permanent experienced rural wage labourers in coffee which are differentiated from untrained workers, peasants or others in rural areas. The situation in the coffee plantation is significantly different from production in almost all other forms of capitalist production for even the most humble workshop uses rudimentary machinery and has margins of skill which separate employees as a collectivity from untrained outsiders.

The fact that achievement is rarely a feature of the wage earning capacity of rural labourers in the plantation coffee industry means that other factors can actually influence the selection of labour in the industry. In particular, gender usually dominates the criteria for choice of pickers as Haarer long ago recommended it should. Women rarely do other more serious or responsible work and they often do the harvesting on the plantation as a family subsidy to the earnings of their permanent labourer husband. Piece rate harvesting is the most inferior form of labour and one which pickers do not like even when they earn reasonable money (New Guinea Highlands Bulletin, April 1965). But women do it. They obviously are in a difficult position. They may work in order to keep their husband employed as a full time labourer. Doubtless also much of the pressure to labour at piece-rates comes directly from husbands employed on the plantation rather than from employers. Ethnicity is also a factor influencing the selection of labour in the plantation coffee industry. This is because plantation labour is labour of the last resort. It is not undertaken by groups who are not land short or can grow cash crops.

In the Papua New Guinea plantation coffee industry plantation labour has not been undertaken by Gorokans despite their location at centre of the plantation industry since the early 1950’s. Gorokans have a range of ways to earn cash from the fertile land not only from smallholder coffee growing but from the production of food crops and vegetables for local marketing. Consequently
most plantation labour in Goroka is from Chimbu province where land is short or from the less fertile outlying areas in Eastern Highlands. With no pressure to employ labour on the basis of achievement planters will hire Chimbu’s because of the belief that they have racial qualities which make them good or ‘tractable’ workers (Finney 1973:52). Added to these various ascriptive factors that determine the selection of labourers for plantation coffee industry is the fact that for many years contract and agreement labour ensured that the planter would experience rapid turnover of even full time staff then it becomes easy to see how the class of rural wage earners has been dissolved in the process of plantation production.

It is a curious feature of plantation agriculture in coffee, which after all is capitalist agriculture based on the payment of labour and the appropriation of surplus value, that the division of labour in many ways resembles ascriptive pre-capitalist systems. The division of the workforce on gender and ethnic lines is reminiscent of village organisation. This factor helps us to understand more clearly the potential for class action by rural wage earners employed on plantations. The implication of this argument is that a class of rural proletarians which is employed on a plantation in a form of production of the type existing on coffee plantations may be increasing numerically but can never mobilise as a class. In such a situation mobilisation of the class of rural proletarians would require not merely the organisation of the class at the level of class relations in opposition to white planters or the state (that is, as a party to influence government or in terms of a trade union movement aiming to influence wage decisions) but it would require conservation of the class at the level of class location (in production) which in turn would depend upon the destruction of the coffee plantation form of production itself.

In Papua New Guinea, changes in the organisation of the plantation labour force are occurring which are liable to make the division of labour on the plantation even less subject to achievement criteria. This is that plantations are moving to
have settled married work forces on the plantation rather than employing the individual male workers as in the days of agreement and contract labour.

A settled married work force was considered to be both less expensive and more productive than the agreement system which has always involved a high turnover of single workers. (Howlett 1980:205)

Howlett has suggested that this new development 'is likely to give considerable impetus to rural proletarianisation' (Howlett 1980:205) but this will only be accurate if we accept that evidence of increases in the exchange of labour power is the same as class formation. But in class action terms the new arrangements might further inhibit mobilisation or even increase dissolution at the level of production because the family labouring unit will become completely dependent on the plantation employer creating the possibility of relations between the married unit and the employer being based more on obligation and patron-client relations than on wage labour relations.
TABLES AND FIGURES
Table 1: Estimated exportable production October-September 1975/76 to 1981/82

(000 bags)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>47,391</td>
<td>46,502</td>
<td>54,571</td>
<td>62,964</td>
<td>58,703</td>
<td>70,434</td>
<td>72,692</td>
</tr>
<tr>
<td>A. Sub-total: Members entitled to a basic quota</td>
<td>45,247</td>
<td>44,405</td>
<td>52,447</td>
<td>60,586</td>
<td>56,335</td>
<td>67,707</td>
<td>69,497</td>
</tr>
<tr>
<td>Colombian Milds</td>
<td>9,458</td>
<td>10,596</td>
<td>11,774</td>
<td>13,081</td>
<td>12,805</td>
<td>14,275</td>
<td>14,816</td>
</tr>
<tr>
<td>Colombia</td>
<td>7,335</td>
<td>8,134</td>
<td>9,643</td>
<td>11,062</td>
<td>10,431</td>
<td>11,590</td>
<td>12,150</td>
</tr>
<tr>
<td>Kenya</td>
<td>1,204</td>
<td>1,679</td>
<td>1,313</td>
<td>1,192</td>
<td>1,601</td>
<td>1,647</td>
<td>1,643</td>
</tr>
<tr>
<td>Tanzania</td>
<td>919</td>
<td>783</td>
<td>818</td>
<td>827</td>
<td>773</td>
<td>1,038</td>
<td>1,023</td>
</tr>
<tr>
<td>Other Milds</td>
<td>12,632</td>
<td>12,897</td>
<td>15,324</td>
<td>16,862</td>
<td>15,802</td>
<td>16,866</td>
<td>17,754</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1,104</td>
<td>1,156</td>
<td>1,303</td>
<td>1,566</td>
<td>1,229</td>
<td>1,936</td>
<td>1,669</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>748</td>
<td>482</td>
<td>755</td>
<td>462</td>
<td>676</td>
<td>746</td>
<td>600</td>
</tr>
<tr>
<td>Ecuador</td>
<td>1,519</td>
<td>1,137</td>
<td>1,596</td>
<td>1,370</td>
<td>1,177</td>
<td>1,383</td>
<td>1,416</td>
</tr>
<tr>
<td>El Salvador</td>
<td>1,614</td>
<td>2,445</td>
<td>2,675</td>
<td>3,228</td>
<td>2,832</td>
<td>2,976</td>
<td>2,700</td>
</tr>
<tr>
<td>Guatemala</td>
<td>1,761</td>
<td>2,170</td>
<td>2,263</td>
<td>2,501</td>
<td>2,175</td>
<td>2,412</td>
<td>2,453</td>
</tr>
<tr>
<td>Honduras</td>
<td>543</td>
<td>576</td>
<td>931</td>
<td>1,024</td>
<td>1,020</td>
<td>1,120</td>
<td>1,264</td>
</tr>
<tr>
<td>India</td>
<td>760</td>
<td>1,004</td>
<td>1,295</td>
<td>1,022</td>
<td>1,684</td>
<td>1,115</td>
<td>1,800</td>
</tr>
<tr>
<td>Mexico</td>
<td>2,514</td>
<td>1,734</td>
<td>2,019</td>
<td>2,966</td>
<td>2,304</td>
<td>2,370</td>
<td>2,600</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>714</td>
<td>774</td>
<td>881</td>
<td>897</td>
<td>936</td>
<td>833</td>
<td>1,170</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>675</td>
<td>699</td>
<td>760</td>
<td>808</td>
<td>835</td>
<td>887</td>
<td>982</td>
</tr>
<tr>
<td>Peru</td>
<td>680</td>
<td>720</td>
<td>846</td>
<td>1,018</td>
<td>934</td>
<td>1,088</td>
<td>1,100</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Unwashed Arabicas</td>
<td>9,104</td>
<td>5,856</td>
<td>12,968</td>
<td>15,941</td>
<td>13,783</td>
<td>18,937</td>
<td>17,833</td>
</tr>
<tr>
<td>Brazil</td>
<td>7,826</td>
<td>4,507</td>
<td>11,633</td>
<td>14,474</td>
<td>12,230</td>
<td>17,233</td>
<td>16,000</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1,278</td>
<td>1,349</td>
<td>1,335</td>
<td>1,467</td>
<td>1,553</td>
<td>1,704</td>
<td>1,833</td>
</tr>
<tr>
<td>Robustas</td>
<td>14,053</td>
<td>15,056</td>
<td>12,381</td>
<td>14,702</td>
<td>13,945</td>
<td>17,629</td>
<td>19,094</td>
</tr>
<tr>
<td>Angola</td>
<td>1,029</td>
<td>930</td>
<td>926</td>
<td>548</td>
<td>264</td>
<td>696</td>
<td>451</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2,037</td>
<td>2,505</td>
<td>3,430</td>
<td>3,653</td>
<td>3,757</td>
<td>4,210</td>
<td>4,112</td>
</tr>
<tr>
<td>OAMCAF</td>
<td>(7,734)</td>
<td>(7,592)</td>
<td>(5,392)</td>
<td>(7,658)</td>
<td>(6,934)</td>
<td>(9,521)</td>
<td>(9,916)</td>
</tr>
<tr>
<td>Benin</td>
<td>18</td>
<td>16</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>Cameroon</td>
<td>1,455</td>
<td>1,281</td>
<td>1,344</td>
<td>1,604</td>
<td>1,624</td>
<td>1,930</td>
<td>2,250</td>
</tr>
<tr>
<td>Central African Rep.</td>
<td>140</td>
<td>155</td>
<td>153</td>
<td>88</td>
<td>185</td>
<td>196</td>
<td>225</td>
</tr>
<tr>
<td>Congo</td>
<td>28</td>
<td>36</td>
<td>60</td>
<td>90</td>
<td>40</td>
<td>41</td>
<td>61</td>
</tr>
<tr>
<td>Gabon</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>5,107</td>
<td>4,782</td>
<td>3,087</td>
<td>4,677</td>
<td>3,908</td>
<td>5,958</td>
<td>5,783</td>
</tr>
<tr>
<td>Madagascar</td>
<td>833</td>
<td>1,142</td>
<td>663</td>
<td>1,088</td>
<td>996</td>
<td>1,203</td>
<td>1,320</td>
</tr>
<tr>
<td>Togo</td>
<td>150</td>
<td>176</td>
<td>81</td>
<td>104</td>
<td>171</td>
<td>177</td>
<td>217</td>
</tr>
<tr>
<td>Uganda</td>
<td>2,288</td>
<td>2,630</td>
<td>1,799</td>
<td>1,814</td>
<td>1,912</td>
<td>1,850</td>
<td>3,265</td>
</tr>
<tr>
<td>Zaire</td>
<td>965</td>
<td>1,399</td>
<td>834</td>
<td>1,029</td>
<td>1,078</td>
<td>1,352</td>
<td>1,350</td>
</tr>
<tr>
<td>B. Sub-total: Members exempt from basic quotas</td>
<td>2,144</td>
<td>2,097</td>
<td>2,124</td>
<td>2,378</td>
<td>2,368</td>
<td>2,727</td>
<td>3,195</td>
</tr>
<tr>
<td>Arabicas</td>
<td>1,653</td>
<td>1,427</td>
<td>1,533</td>
<td>1,533</td>
<td>1,581</td>
<td>1,684</td>
<td>2,021</td>
</tr>
<tr>
<td>Bolivia</td>
<td>74</td>
<td>114</td>
<td>60</td>
<td>111</td>
<td>101</td>
<td>139</td>
<td>144</td>
</tr>
<tr>
<td>Burundi</td>
<td>323</td>
<td>320</td>
<td>339</td>
<td>453</td>
<td>345</td>
<td>590</td>
<td>471</td>
</tr>
<tr>
<td>Haiti</td>
<td>364</td>
<td>264</td>
<td>317</td>
<td>236</td>
<td>412</td>
<td>245</td>
<td>367</td>
</tr>
<tr>
<td>Jamaica</td>
<td>22</td>
<td>15</td>
<td>14</td>
<td>14</td>
<td>17</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Malawi</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Panama</td>
<td>3</td>
<td>13</td>
<td>60</td>
<td>35</td>
<td>50</td>
<td>80</td>
<td>76</td>
</tr>
<tr>
<td>Paraguay</td>
<td>88</td>
<td>25</td>
<td>71</td>
<td>80</td>
<td>29</td>
<td>140</td>
<td>246</td>
</tr>
<tr>
<td>------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Rwanda</td>
<td>507</td>
<td>401</td>
<td>320</td>
<td>452</td>
<td>494</td>
<td>498</td>
<td>489</td>
</tr>
<tr>
<td>Venezuela</td>
<td>222</td>
<td>189</td>
<td>271</td>
<td>75</td>
<td>59</td>
<td>-114</td>
<td>110</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>48</td>
<td>83</td>
<td>78</td>
<td>73</td>
<td>68</td>
<td>86</td>
<td>93</td>
</tr>
<tr>
<td>Robustas</td>
<td>491</td>
<td>670</td>
<td>591</td>
<td>845</td>
<td>787</td>
<td>1,043</td>
<td>1,174</td>
</tr>
<tr>
<td>Ghana</td>
<td>41</td>
<td>55</td>
<td>22</td>
<td>9</td>
<td>38</td>
<td>26</td>
<td>42</td>
</tr>
<tr>
<td>Guinea</td>
<td>17</td>
<td>33</td>
<td>10</td>
<td>54</td>
<td>28</td>
<td>55</td>
<td>100</td>
</tr>
<tr>
<td>Liberia</td>
<td>62</td>
<td>156</td>
<td>146</td>
<td>157</td>
<td>150</td>
<td>150</td>
<td>175</td>
</tr>
<tr>
<td>Nigeria</td>
<td>109</td>
<td>31</td>
<td>37</td>
<td>31</td>
<td>12</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Philippines</td>
<td>172</td>
<td>196</td>
<td>225</td>
<td>268</td>
<td>325</td>
<td>502</td>
<td>463</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>52</td>
<td>144</td>
<td>100</td>
<td>221</td>
<td>169</td>
<td>155</td>
<td>178</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>18</td>
<td>11</td>
<td>22</td>
<td>68</td>
<td>40</td>
<td>102</td>
<td>107</td>
</tr>
<tr>
<td>Thailand</td>
<td></td>
<td>38</td>
<td>44</td>
<td>29</td>
<td>37</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SUMMARY**

<table>
<thead>
<tr>
<th>TOTAL</th>
<th>47,391</th>
<th>46,502</th>
<th>54,571</th>
<th>62,964</th>
<th>58,703</th>
<th>70,434</th>
<th>72,692</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMBERS ENTITLED TO A BASIC QUOTA</td>
<td>45,247</td>
<td>44,405</td>
<td>52,447</td>
<td>60,586</td>
<td>56,335</td>
<td>67,707</td>
<td>69,497</td>
</tr>
<tr>
<td>MEMBERS EXEMPT FROM BASIC QUOTAS</td>
<td>2,144</td>
<td>2,097</td>
<td>2,124</td>
<td>2,378</td>
<td>2,368</td>
<td>2,727</td>
<td>3,195</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>7,826</td>
<td>4,507</td>
<td>11,633</td>
<td>14,474</td>
<td>12,230</td>
<td>17,230</td>
<td>16,000</td>
</tr>
<tr>
<td>COLOMBIA</td>
<td>7,335</td>
<td>8,134</td>
<td>9,643</td>
<td>11,062</td>
<td>10,431</td>
<td>11,590</td>
<td>12,150</td>
</tr>
<tr>
<td>OAMCAF</td>
<td>7,734</td>
<td>7,592</td>
<td>5,392</td>
<td>7,658</td>
<td>6,934</td>
<td>9,521</td>
<td>9,916</td>
</tr>
<tr>
<td>OTHER ARABICAS</td>
<td>17,686</td>
<td>18,135</td>
<td>20,323</td>
<td>21,881</td>
<td>21,310</td>
<td>22,939</td>
<td>24,274</td>
</tr>
<tr>
<td>OTHER ROBUSTAS</td>
<td>6,810</td>
<td>8,134</td>
<td>7,580</td>
<td>7,889</td>
<td>7,796</td>
<td>9,151</td>
<td>10,352</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>7,826</td>
<td>4,507</td>
<td>11,633</td>
<td>14,474</td>
<td>12,230</td>
<td>17,233</td>
<td>16,000</td>
</tr>
<tr>
<td>OTHERS</td>
<td>39,565</td>
<td>41,995</td>
<td>42,938</td>
<td>48,490</td>
<td>46,473</td>
<td>53,201</td>
<td>56,692</td>
</tr>
<tr>
<td>ARABICAS</td>
<td>32,847</td>
<td>30,776</td>
<td>41,599</td>
<td>47,417</td>
<td>43,971</td>
<td>51,762</td>
<td>52,424</td>
</tr>
<tr>
<td>ROBUSTAS</td>
<td>14,544</td>
<td>15,726</td>
<td>12,972</td>
<td>15,547</td>
<td>14,732</td>
<td>18,672</td>
<td>20,268</td>
</tr>
</tbody>
</table>

**SOURCE:** Mwandha, Nicholls and Sargent (1985)
Table 2
Imports by importing members from all sources October-September 1975/76 to 1979/80
(000 bags)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>60,321</td>
<td>54,502</td>
<td>49,876</td>
<td>63,906</td>
<td>60,808</td>
</tr>
<tr>
<td>USA</td>
<td>21,833</td>
<td>18,400</td>
<td>17,228</td>
<td>21,890</td>
<td>20,128</td>
</tr>
<tr>
<td>EEC</td>
<td>24,125</td>
<td>22,444</td>
<td>21,495</td>
<td>26,664</td>
<td>25,417</td>
</tr>
<tr>
<td>Belgium/Luxembourg</td>
<td>1,472</td>
<td>1,396</td>
<td>1,317</td>
<td>1,739</td>
<td>1,663</td>
</tr>
<tr>
<td>Denmark</td>
<td>1,119</td>
<td>974</td>
<td>869</td>
<td>1,029</td>
<td>1,038</td>
</tr>
<tr>
<td>France</td>
<td>5,438</td>
<td>5,029</td>
<td>5,064</td>
<td>5,885</td>
<td>5,626</td>
</tr>
<tr>
<td>Germany, F.R. of</td>
<td>6,620</td>
<td>6,754</td>
<td>6,560</td>
<td>7,960</td>
<td>7,994</td>
</tr>
<tr>
<td>Greece</td>
<td>343</td>
<td>268</td>
<td>259</td>
<td>382</td>
<td>372</td>
</tr>
<tr>
<td>Ireland</td>
<td>63</td>
<td>46</td>
<td>42</td>
<td>68</td>
<td>61</td>
</tr>
<tr>
<td>Italy</td>
<td>3,528</td>
<td>3,256</td>
<td>3,116</td>
<td>3,668</td>
<td>3,794</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2,984</td>
<td>2,538</td>
<td>2,489</td>
<td>2,938</td>
<td>2,585</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2,558</td>
<td>2,183</td>
<td>1,779</td>
<td>2,995</td>
<td>2,284</td>
</tr>
<tr>
<td>Other Members</td>
<td>14,363</td>
<td>13,658</td>
<td>11,153</td>
<td>15,352</td>
<td>15,263</td>
</tr>
<tr>
<td>Australia</td>
<td>504</td>
<td>533</td>
<td>371</td>
<td>582</td>
<td>640</td>
</tr>
<tr>
<td>Austria</td>
<td>645</td>
<td>580</td>
<td>560</td>
<td>721</td>
<td>845</td>
</tr>
<tr>
<td>Canada</td>
<td>1,746</td>
<td>1,492</td>
<td>1,581</td>
<td>1,863</td>
<td>1,685</td>
</tr>
<tr>
<td>Cyprus</td>
<td>24</td>
<td>29</td>
<td>23</td>
<td>35</td>
<td>28</td>
</tr>
<tr>
<td>Finland</td>
<td>1,135</td>
<td>974</td>
<td>743</td>
<td>1,121</td>
<td>1,195</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>197</td>
<td>313</td>
<td>48</td>
<td>73</td>
<td>122</td>
</tr>
<tr>
<td>Hungary</td>
<td>625</td>
<td>658</td>
<td>455</td>
<td>507</td>
<td>634</td>
</tr>
<tr>
<td>Israel</td>
<td>288</td>
<td>179</td>
<td>175</td>
<td>205</td>
<td>168</td>
</tr>
</tbody>
</table>
Table 2 (cont.)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>2,678</td>
<td>2,765</td>
<td>1,497</td>
<td>3,266</td>
<td>3,231</td>
</tr>
<tr>
<td>New Zealand</td>
<td>91</td>
<td>79</td>
<td>79</td>
<td>101</td>
<td>134</td>
</tr>
<tr>
<td>Norway</td>
<td>734</td>
<td>585</td>
<td>582</td>
<td>715</td>
<td>678</td>
</tr>
<tr>
<td>Portugal</td>
<td>328</td>
<td>240</td>
<td>142</td>
<td>203</td>
<td>193</td>
</tr>
<tr>
<td>Singapore</td>
<td>378</td>
<td>393</td>
<td>588</td>
<td>477</td>
<td>426</td>
</tr>
<tr>
<td>Spain</td>
<td>1,518</td>
<td>1,454</td>
<td>1,414</td>
<td>1,855</td>
<td>1,707</td>
</tr>
<tr>
<td>Sweden</td>
<td>2,004</td>
<td>1,487</td>
<td>1,382</td>
<td>1,687</td>
<td>1,734</td>
</tr>
<tr>
<td>Switzerland</td>
<td>998</td>
<td>1,019</td>
<td>812</td>
<td>1,009</td>
<td>1,037</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>470</td>
<td>878</td>
<td>701</td>
<td>932</td>
<td>806</td>
</tr>
</tbody>
</table>

| GREEN (Processed) | 55,288 | 49,196 | 45,764 | 57,414 | 55,057 |
| Roasted           | (5,033) | (5,306) | (4,112) | (6,492) | (5,751) |
| Soluble           | 1,080   | 1,226   | 1,133   | 1,422   | 1,352   |

| From | 56,163 | 50,588 | 46,687 | 59,647 | 56,732 |
|      | 3,567  | 3,504  | 2,788  | 3,883  | 3,741  |
|      | 552    | 396    | 388    | 353    | 316    |
|      | 39     | 14     | 13     | 23     | 19     |

* Estimated

Source: Mwandha, Nicholls and Sargent (1985)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEMBERS ENTITLED TO A BASIC QUOTA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Colombian Milds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>44.9</td>
<td>55.6</td>
<td>64.6</td>
<td>66.3</td>
<td>58.1</td>
<td>61.9</td>
</tr>
<tr>
<td>Kenya</td>
<td>15.0</td>
<td>27.0</td>
<td>41.3</td>
<td>31.5</td>
<td>26.8</td>
<td>21.1</td>
</tr>
<tr>
<td>Tanzania</td>
<td>18.6</td>
<td>33.0</td>
<td>41.0</td>
<td>36.5</td>
<td>27.1</td>
<td>26.9</td>
</tr>
<tr>
<td><strong>Other Milds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td>19.7</td>
<td>26.9</td>
<td>41.2</td>
<td>36.2</td>
<td>33.8</td>
<td>24.2</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>4.8</td>
<td>14.1</td>
<td>23.7</td>
<td>14.3</td>
<td>18.2</td>
<td>8.0</td>
</tr>
<tr>
<td>Ecuador</td>
<td>7.2</td>
<td>18.2</td>
<td>13.1</td>
<td>18.8</td>
<td>13.4</td>
<td>5.3</td>
</tr>
<tr>
<td>El Salvador</td>
<td>35.9</td>
<td>54.7</td>
<td>63.0</td>
<td>51.9</td>
<td>63.6</td>
<td>53.8</td>
</tr>
<tr>
<td>Guatemala</td>
<td>25.6</td>
<td>32.0</td>
<td>44.6</td>
<td>42.8</td>
<td>34.1</td>
<td>30.1</td>
</tr>
<tr>
<td>Honduras</td>
<td>19.3</td>
<td>25.2</td>
<td>33.0</td>
<td>34.9</td>
<td>26.9</td>
<td>25.3</td>
</tr>
<tr>
<td>India</td>
<td>1.7</td>
<td>2.6</td>
<td>4.6</td>
<td>3.1</td>
<td>2.7</td>
<td>4.0</td>
</tr>
<tr>
<td>Mexico</td>
<td>6.6</td>
<td>12.4</td>
<td>11.5</td>
<td>7.3</td>
<td>6.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>14.8</td>
<td>20.4</td>
<td>30.5</td>
<td>31.4</td>
<td>28.0</td>
<td>36.8</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>10.0</td>
<td>23.0</td>
<td>26.6</td>
<td>21.4</td>
<td>18.1</td>
<td>15.7</td>
</tr>
<tr>
<td>Peru</td>
<td>3.9</td>
<td>8.5</td>
<td>11.7</td>
<td>8.9</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td><strong>Unwashed Arabicas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>10.8</td>
<td>23.7</td>
<td>21.6</td>
<td>18.1</td>
<td>15.3</td>
<td>12.4</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>34.0</td>
<td>57.3</td>
<td>75.9</td>
<td>80.9</td>
<td>68.6</td>
<td>64.1</td>
</tr>
</tbody>
</table>
Table 3 (cont.)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Robustas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angola</td>
<td>1.4</td>
<td>2.8</td>
<td>4.9&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.5&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.0&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.7&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameroon</td>
<td>23.8</td>
<td>24.0</td>
<td>31.9&lt;sup&gt;a&lt;/sup&gt;</td>
<td>29.7&lt;sup&gt;a&lt;/sup&gt;</td>
<td>25.3&lt;sup&gt;a&lt;/sup&gt;</td>
<td>21.8&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>25.1</td>
<td>34.3</td>
<td>37.5&lt;sup&gt;a&lt;/sup&gt;</td>
<td>25.0&lt;sup&gt;a&lt;/sup&gt;</td>
<td>31.1&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Madagascar</td>
<td>21.8</td>
<td>42.9</td>
<td>48.8</td>
<td>41.9</td>
<td>45.4</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>73.5</td>
<td>85.4</td>
<td>93.4</td>
<td>90.2</td>
<td>98.0&lt;sup&gt;a&lt;/sup&gt;</td>
<td>98.7&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Zaire&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6.3</td>
<td>13.8</td>
<td>19.5</td>
<td>17.8</td>
<td>10.4</td>
<td>10.1</td>
</tr>
</tbody>
</table>

Note: If no source is indicated, the figures are those provided by Member. A blank denotes that the information was not available.
- Less than 0.05 percent.

<sup>b</sup> Monthly returns and UN Statistical Yearbook, 1979/80.

Source: Mwandha, Nicholls and Sargent (1985)
Table 4

Shares of United States green coffee imports

1977 to 1980

percent

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>16.6</td>
<td>14.9</td>
<td>9.8</td>
<td>19.3</td>
</tr>
<tr>
<td>Colombia</td>
<td>13.2</td>
<td>15.5</td>
<td>20.1</td>
<td>18.8</td>
</tr>
<tr>
<td>Indonesia</td>
<td>5.8</td>
<td>6.5</td>
<td>6.6</td>
<td>7.2</td>
</tr>
<tr>
<td>Mexico</td>
<td>9.5</td>
<td>7.7</td>
<td>10.1</td>
<td>7.4</td>
</tr>
<tr>
<td>Uganda</td>
<td>6.5</td>
<td>2.4</td>
<td>1.9</td>
<td>3.5</td>
</tr>
<tr>
<td>El Salvador</td>
<td>7.0</td>
<td>3.5</td>
<td>5.8</td>
<td>7.6</td>
</tr>
<tr>
<td>Ecuador</td>
<td>3.4</td>
<td>5.8</td>
<td>3.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Guatemala</td>
<td>5.6</td>
<td>5.2</td>
<td>6.5</td>
<td>5.1</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1.9</td>
<td>2.5</td>
<td>2.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Peru</td>
<td>3.1</td>
<td>3.6</td>
<td>4.9</td>
<td>3.1</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>4.5</td>
<td>4.3</td>
<td>4.3</td>
<td>2.4</td>
</tr>
<tr>
<td>India</td>
<td>1.1</td>
<td>1.5</td>
<td>1.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Dominican Rep.</td>
<td>3.9</td>
<td>2.5</td>
<td>2.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Honduras</td>
<td>1.5</td>
<td>3.0</td>
<td>2.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Philippine Rep.</td>
<td></td>
<td>0.3</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Rwanda</td>
<td>0.8</td>
<td>1.2</td>
<td>0.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Madagascar</td>
<td>1.4</td>
<td>2.2</td>
<td>1.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Cameroon</td>
<td>0.7</td>
<td>1.2</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Zaire</td>
<td>2.0</td>
<td>3.3</td>
<td>0.4</td>
<td>0.8</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1.8</td>
<td>1.8</td>
<td>2.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Burundi</td>
<td>0.8</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Paraguay</td>
<td>0.1</td>
<td>1.1</td>
<td>3.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>0.8</td>
<td>0.8</td>
<td>1.0</td>
<td>0.8</td>
</tr>
<tr>
<td>West Germany</td>
<td></td>
<td></td>
<td></td>
<td>0.9</td>
</tr>
<tr>
<td>Haiti</td>
<td>0.6</td>
<td>0.3</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Liberia</td>
<td>0.4</td>
<td>0.3</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Venezuela</td>
<td>1.0</td>
<td>1.3</td>
<td>0.6</td>
<td>0.2</td>
</tr>
<tr>
<td>Angola</td>
<td>1.4</td>
<td>2.2</td>
<td>0.2</td>
<td>0.7</td>
</tr>
<tr>
<td>Tanzania</td>
<td>1.5</td>
<td>1.8</td>
<td>0.9</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Sub-total: 96.9 97.7 97.9 97.8
Others: 3.1 2.3 2.1 2.2

TOTAL: 100.0 100.0 100.0 100.0

Source: Mwandha, Nicholls and Sargent (1985)
## TABLE 5. PAPUA NEW GUINEA: COFFEE EXPORTS

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
<th>$A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947/48</td>
<td>48</td>
<td>3,768</td>
</tr>
<tr>
<td>1948/49</td>
<td>7</td>
<td>1,402</td>
</tr>
<tr>
<td>1949/50</td>
<td>17</td>
<td>3,584</td>
</tr>
<tr>
<td>1950/51</td>
<td>21</td>
<td>4,101</td>
</tr>
<tr>
<td>1951/52</td>
<td>33</td>
<td>8,260</td>
</tr>
<tr>
<td>1952/53</td>
<td>35</td>
<td>11,000</td>
</tr>
<tr>
<td>1953/54</td>
<td>47</td>
<td>31,000</td>
</tr>
<tr>
<td>1954/55</td>
<td>87</td>
<td>60,000</td>
</tr>
<tr>
<td>1955/56</td>
<td>107</td>
<td>75,000</td>
</tr>
<tr>
<td>1956/57</td>
<td>274</td>
<td>93,000</td>
</tr>
<tr>
<td>1957/58</td>
<td>385</td>
<td>225,100</td>
</tr>
<tr>
<td>1958/59</td>
<td>1,008</td>
<td>456,000</td>
</tr>
<tr>
<td>1959/60</td>
<td>1,488</td>
<td>717,100</td>
</tr>
<tr>
<td>1960/61</td>
<td>2,294</td>
<td>1,106,000</td>
</tr>
<tr>
<td>1961/62</td>
<td>3,443</td>
<td>1,557,000</td>
</tr>
<tr>
<td>1962/63</td>
<td>4,845</td>
<td>2,014,000</td>
</tr>
<tr>
<td>1963/64</td>
<td>6,831</td>
<td>2,683,000</td>
</tr>
<tr>
<td>1964/65</td>
<td>8,687</td>
<td>3,647,500</td>
</tr>
<tr>
<td>1965/66</td>
<td>10,804</td>
<td>4,393,500</td>
</tr>
<tr>
<td>1966/67</td>
<td></td>
<td>10,208,000</td>
</tr>
<tr>
<td>1967/68</td>
<td></td>
<td>14,920,000</td>
</tr>
<tr>
<td>1968/69</td>
<td></td>
<td>15,531,000</td>
</tr>
<tr>
<td>1969/70</td>
<td></td>
<td>20,182,000</td>
</tr>
<tr>
<td>1970/71</td>
<td></td>
<td>20,572,000</td>
</tr>
<tr>
<td>1971/72</td>
<td></td>
<td>20,457,000</td>
</tr>
<tr>
<td>1972/73</td>
<td></td>
<td>23,394,000</td>
</tr>
<tr>
<td>1973/74</td>
<td></td>
<td>28,847,000</td>
</tr>
<tr>
<td>1974/75</td>
<td></td>
<td>33,501,000</td>
</tr>
<tr>
<td>March Qtr.</td>
<td>36,769</td>
<td>33,554</td>
</tr>
<tr>
<td>June &quot;</td>
<td>4,078</td>
<td>3,643</td>
</tr>
<tr>
<td>1975/76</td>
<td></td>
<td>4,116</td>
</tr>
<tr>
<td>Sept. Qtr.</td>
<td>22,170</td>
<td>21,565</td>
</tr>
<tr>
<td>Dec. &quot;</td>
<td>5,574</td>
<td>5,576</td>
</tr>
<tr>
<td>March &quot;</td>
<td>3,335</td>
<td>4,319</td>
</tr>
<tr>
<td>June &quot;</td>
<td>6,068p</td>
<td>10,771p</td>
</tr>
<tr>
<td>1976/77</td>
<td></td>
<td>36,920p</td>
</tr>
<tr>
<td>Sept. Qtr.</td>
<td>17,849p</td>
<td>48,156p</td>
</tr>
<tr>
<td>Dec. &quot;</td>
<td>20,858p</td>
<td>9,717p</td>
</tr>
<tr>
<td>March &quot;</td>
<td>2,998p</td>
<td>37,805p</td>
</tr>
<tr>
<td>June &quot;</td>
<td>8,108p</td>
<td>183,500</td>
</tr>
</tbody>
</table>

**SOURCES:** Cartledge (1978) and Bank of Papua New Guinea Quarterly Economic Bulletin, June Quarter 1977.
TABLE 6. PAPUA NEW GUINEA: EXPORT DESTINATIONS

<table>
<thead>
<tr>
<th>Financial Year (July to June)</th>
<th>Australia</th>
<th>U.S.A.</th>
<th>W. Germany</th>
<th>U.K.</th>
<th>Japan</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959/60</td>
<td>1,422</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>52</td>
<td></td>
<td>1,488</td>
</tr>
<tr>
<td>1960/61</td>
<td>2,059</td>
<td>19</td>
<td>5</td>
<td>5</td>
<td>211</td>
<td></td>
<td>2,294</td>
</tr>
<tr>
<td>1961/62</td>
<td>2,388</td>
<td>32</td>
<td>110</td>
<td>84</td>
<td>5</td>
<td>824</td>
<td>3,443</td>
</tr>
<tr>
<td>1962/63</td>
<td>2,845</td>
<td>11</td>
<td>207</td>
<td>154</td>
<td>5</td>
<td>1,623</td>
<td>4,845</td>
</tr>
<tr>
<td>1963/64</td>
<td>3,665</td>
<td>20</td>
<td>889</td>
<td>271</td>
<td>129</td>
<td>1,857</td>
<td>6,831</td>
</tr>
<tr>
<td>1964/65</td>
<td>5,360</td>
<td>78</td>
<td>1,375</td>
<td>358</td>
<td>207</td>
<td>1,309</td>
<td>8,687</td>
</tr>
<tr>
<td>1965/66</td>
<td>4,780</td>
<td>1,211</td>
<td>1,370</td>
<td>1,221</td>
<td>265</td>
<td>1,957</td>
<td>10,804</td>
</tr>
<tr>
<td>1966/67</td>
<td>5,456</td>
<td>2,146</td>
<td>1,918</td>
<td>1,725</td>
<td>421</td>
<td>1,245</td>
<td>12,911</td>
</tr>
<tr>
<td>1967/68</td>
<td>5,500</td>
<td>5,000</td>
<td>3,400</td>
<td>3,200</td>
<td>92</td>
<td>1,075</td>
<td>18,267</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>International Coffee Year</th>
<th>(Bags)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1968/69</td>
<td>6,831</td>
<td>5,694</td>
<td>3,794</td>
<td>3,482</td>
<td>75</td>
<td>683</td>
<td>20,559</td>
</tr>
<tr>
<td>1969/70</td>
<td>6,927</td>
<td>7,523</td>
<td>3,567</td>
<td>3,392</td>
<td>274</td>
<td>1,910</td>
<td>23,593</td>
</tr>
<tr>
<td>1970/71</td>
<td>7,552</td>
<td>9,505</td>
<td>2,136</td>
<td>3,614</td>
<td>nil</td>
<td>1,668</td>
<td>24,475</td>
</tr>
<tr>
<td>1971/72</td>
<td>8,322</td>
<td>6,872</td>
<td>4,652</td>
<td>3,428</td>
<td>464</td>
<td>3,999</td>
<td>27,737</td>
</tr>
<tr>
<td>1972/73</td>
<td>9,435</td>
<td>13,325</td>
<td>3,870</td>
<td>2,669</td>
<td>3,025</td>
<td>7,045</td>
<td>39,369</td>
</tr>
</tbody>
</table>

For earlier years the destination was mainly Australia.

SOURCE: Cartledge (1978) and Department of Foreign Affairs and Trade, Port Moresby.
TABLE 7. PAPUA NEW GUINEA COFFEE EXPORTS: BY GRADE

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AA and A</td>
<td>12.3</td>
<td>16.9</td>
<td>18.1</td>
<td>12.8</td>
<td>14.3</td>
<td>15.6</td>
</tr>
<tr>
<td>X</td>
<td>26.4</td>
<td>19.3</td>
<td>21.2</td>
<td>17.3</td>
<td>13.3</td>
<td>15.0</td>
</tr>
<tr>
<td>Y</td>
<td>50.7</td>
<td>55.9</td>
<td>53.2</td>
<td>62.4</td>
<td>60.8</td>
<td>61.6</td>
</tr>
<tr>
<td>Other</td>
<td>10.8</td>
<td>7.9</td>
<td>7.5</td>
<td>7.5</td>
<td>11.6</td>
<td>7.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

SOURCE: Department of Foreign Affairs and Trade, Port Moresby.
<table>
<thead>
<tr>
<th>Year ended</th>
<th>Large holdings</th>
<th>Small holdings</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 Mar 1955</td>
<td>100</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1956</td>
<td>137</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1957</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1958</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1959</td>
<td>701</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1960</td>
<td>973</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1961</td>
<td>1,783</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1962</td>
<td>2,018</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1963</td>
<td>2,875</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1964</td>
<td>3,081</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1965</td>
<td>3,428</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1966</td>
<td>3,936</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1967</td>
<td>4,564</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>30 Jun 1968</td>
<td>4,780</td>
<td>9,789</td>
<td>14,569</td>
</tr>
<tr>
<td>1969</td>
<td>6,295</td>
<td>15,182</td>
<td>21,477</td>
</tr>
<tr>
<td>1970</td>
<td>6,358</td>
<td>21,137</td>
<td>27,495</td>
</tr>
<tr>
<td>1971</td>
<td>7,631</td>
<td>19,336</td>
<td>26,967</td>
</tr>
<tr>
<td>1972</td>
<td>8,292</td>
<td>20,723</td>
<td>29,015</td>
</tr>
<tr>
<td>1973</td>
<td>9,824</td>
<td>24,974</td>
<td>34,798</td>
</tr>
<tr>
<td>1974</td>
<td>9,702</td>
<td>24,382</td>
<td>34,084</td>
</tr>
<tr>
<td>1975</td>
<td>10,704</td>
<td>26,241</td>
<td>36,945</td>
</tr>
<tr>
<td>1976</td>
<td>10,198</td>
<td>29,337</td>
<td>39,535</td>
</tr>
<tr>
<td>1977</td>
<td>11,362</td>
<td>27,195</td>
<td>38,557</td>
</tr>
<tr>
<td>31 Dec 1978</td>
<td>12,728</td>
<td>33,237</td>
<td>45,965</td>
</tr>
</tbody>
</table>

**SOURCE:** Jackson (1981).
STRUCTURE OF THE COLONIAL COFFEE MARKET IN PAPUA AND NEW GUINEA

FIGURE 1

ACCESS TO AUSTRALIAN MARKET

EXPORTER

PROCESSOR

GRADING (QUALITY) OWNERSHIP BY WHITES

COFFEE BUYER

SPONSORSHIP & FINANCE FROM WHITES

SMALL HOLDER

MIDDLE PEASANT PLANTATION

EUROPEAN PLANTATION

COLLUSION

PINCH POINTS
Figure 2

PAPUA NEW GUINEA COFFEE EXPORTS & VALUE

Figure 3: THE RISE AND FALL OF COFFEE PRICES

PAPUA NEW GUINEA EXPORT COMMODITY PRICES

* World indicator price; gold per fine ounce.

Source: Bank of Papua New Guinea, Port Moresby, Quarterly Economic Bulletin, March 1982
STRUCTURE OF THE POST-COLONIAL COFFEE MARKET IN PAPUA NEW GUINEA

FIGURE 4

COFFEE STAMPS

CIB LICENSED EXPORTER

GRADING EXCESS CAPACITY COFFEE BORDER CIB LICENCE

PROCESSOR

NATIONALS ONLY CHERRY OR PARCHMENT

COFFEE BUYER

SMALLHOLDER

PLANTATIONS

20 HECs.

COLLUSION PINCH POINTS
Figure 5. STRUCTURE AND OWNERSHIP OF PNG COFFEE INDUSTRY.

Table 9

CORRESPONDENCE BETWEEN AVERAGE EARNINGS IN RURAL INDUSTRIES AND THE RURAL MINIMUM WAGE, 1959 TO 1978

<table>
<thead>
<tr>
<th></th>
<th>Rural industries average earnings (Papua New Guineans) (a)</th>
<th>Rural minimum wage (including rations and issues)(b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>3.33</td>
<td>-</td>
</tr>
<tr>
<td>1960</td>
<td>2.79</td>
<td>-</td>
</tr>
<tr>
<td>1961</td>
<td>3.01</td>
<td>3.01</td>
</tr>
<tr>
<td>1962</td>
<td>3.18</td>
<td>3.15</td>
</tr>
<tr>
<td>1963</td>
<td>3.22</td>
<td>3.56</td>
</tr>
<tr>
<td>1964</td>
<td>3.31</td>
<td>3.00</td>
</tr>
<tr>
<td>1965</td>
<td>3.30</td>
<td>3.61</td>
</tr>
<tr>
<td>1966</td>
<td>3.44</td>
<td>3.34</td>
</tr>
<tr>
<td>1967</td>
<td>3.45</td>
<td>3.29</td>
</tr>
<tr>
<td>1968</td>
<td>3.78</td>
<td>3.59</td>
</tr>
<tr>
<td>1969</td>
<td>3.87</td>
<td>3.57</td>
</tr>
<tr>
<td>1970</td>
<td>4.02</td>
<td>3.56 (4.48)(c)</td>
</tr>
<tr>
<td>1971</td>
<td>5.02</td>
<td>3.60</td>
</tr>
<tr>
<td>1972</td>
<td>5.12</td>
<td>4.27</td>
</tr>
<tr>
<td>1973</td>
<td>5.52</td>
<td>5.90 (d)</td>
</tr>
<tr>
<td>1974</td>
<td>6.14</td>
<td>5.90</td>
</tr>
<tr>
<td>1975</td>
<td>8.26</td>
<td>8.00</td>
</tr>
<tr>
<td>1976</td>
<td>9.84</td>
<td>8.90</td>
</tr>
<tr>
<td>1977</td>
<td>10.68</td>
<td>9.43 and 9.90</td>
</tr>
<tr>
<td>1978</td>
<td>11.37</td>
<td>10.73 and 10.98</td>
</tr>
</tbody>
</table>

(a) Current price average annual earnings (Table 3.6) divided by 365/7.

(b) Minimum wage (including rations) from Tables 3.3 and 3.2 lagged one year in order to get as close an approximation as possible to the average earnings "year" (see Table 3.5) for which it was in force.

(c) Figure in brackets is an alternative estimate for this year: see note (f) to Table 3.3.

(d) All-cash minimum wage.

Source: Jackson (1981)
Table 10  
PAPUA NEW GUINEA — MONTHLY COFFEE EXPORTS — VALUE (FOB IN KINA OR $A) 
AND BAGS (60 KG)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>51,639</td>
<td>2,382</td>
<td>22,847</td>
<td>1,179</td>
<td>30,242</td>
<td>1,638</td>
</tr>
<tr>
<td>February</td>
<td>26,765</td>
<td>1,305</td>
<td>15,841</td>
<td>807</td>
<td>24,493</td>
<td>1,307</td>
</tr>
<tr>
<td>March</td>
<td>36,405</td>
<td>1,772</td>
<td>21,787</td>
<td>1,172</td>
<td>13,334</td>
<td>698</td>
</tr>
<tr>
<td>April</td>
<td>20,005</td>
<td>993</td>
<td>23,895</td>
<td>1,318</td>
<td>30,051</td>
<td>1,522</td>
</tr>
<tr>
<td>May</td>
<td>12,571</td>
<td>640</td>
<td>13,059</td>
<td>723</td>
<td>26,000</td>
<td>1,234</td>
</tr>
<tr>
<td>June</td>
<td>60,077</td>
<td>3,111</td>
<td>39,337</td>
<td>2,387</td>
<td>28,162</td>
<td>1,348</td>
</tr>
<tr>
<td>July</td>
<td>129,841</td>
<td>6,905</td>
<td>147,749</td>
<td>8,808</td>
<td>99,325</td>
<td>4,822</td>
</tr>
<tr>
<td>August</td>
<td>53,455</td>
<td>2,839</td>
<td>44,705</td>
<td>2,549</td>
<td>149,674</td>
<td>8,779</td>
</tr>
<tr>
<td>September</td>
<td>92,180</td>
<td>4,753</td>
<td>125,188</td>
<td>6,860</td>
<td>118,880</td>
<td>7,877</td>
</tr>
<tr>
<td>October</td>
<td>64,776</td>
<td>3,269</td>
<td>54,070</td>
<td>2,809</td>
<td>25,891</td>
<td>1,884</td>
</tr>
<tr>
<td>November</td>
<td>18,765</td>
<td>938</td>
<td>61,467</td>
<td>3,294</td>
<td>37,526</td>
<td>2,730</td>
</tr>
<tr>
<td>December</td>
<td>50,147</td>
<td>2,541</td>
<td>28,305</td>
<td>1,481</td>
<td>12,200</td>
<td>962</td>
</tr>
</tbody>
</table>

TOTAL  616,626  31,448 598,250 33,387 595,578 34,801 799,220 100,158 626,079 143,709 769,372 107,341

Source: Department of Foreign Affairs and Trade, Port Moresby
Table 11: Change in ownership of coffee plantations

<table>
<thead>
<tr>
<th>Date of Take-over</th>
<th>Acreage</th>
<th>January 1980 Owner/manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Highlands Province</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kami</td>
<td>27.1.78</td>
<td>93</td>
</tr>
<tr>
<td>Kiloparoka</td>
<td>17.5.78</td>
<td>95</td>
</tr>
<tr>
<td>Upegu</td>
<td>2.3.79</td>
<td>135</td>
</tr>
<tr>
<td>Aromet</td>
<td>1.9.78</td>
<td>120</td>
</tr>
<tr>
<td>Huvei</td>
<td>13.3.79</td>
<td>232</td>
</tr>
<tr>
<td>Lahamenengu</td>
<td>1.7.77</td>
<td>50</td>
</tr>
<tr>
<td>Erinvale</td>
<td>1.7.77</td>
<td>170</td>
</tr>
<tr>
<td>Roka</td>
<td>1.4.78</td>
<td>110</td>
</tr>
<tr>
<td>Aionora</td>
<td>May 1977</td>
<td>130</td>
</tr>
<tr>
<td>Kawaita</td>
<td>1971</td>
<td>110</td>
</tr>
<tr>
<td>Tuta</td>
<td>1979</td>
<td>80</td>
</tr>
<tr>
<td>Numbia</td>
<td>May 1978</td>
<td>160</td>
</tr>
<tr>
<td>Karangka</td>
<td>August 1978</td>
<td>80</td>
</tr>
<tr>
<td>Kabe (including Muriho)</td>
<td>May 1976</td>
<td>100</td>
</tr>
<tr>
<td>Asaro Coffee Estate</td>
<td></td>
<td>170</td>
</tr>
<tr>
<td>Obihaka</td>
<td>1974</td>
<td>140</td>
</tr>
<tr>
<td>Clearance</td>
<td>1974</td>
<td>250</td>
</tr>
<tr>
<td>Kesa</td>
<td>1974</td>
<td>75</td>
</tr>
<tr>
<td>Mountain Dale (Anego)</td>
<td>18.7.75</td>
<td>125</td>
</tr>
<tr>
<td>Bema</td>
<td>1975</td>
<td>178</td>
</tr>
<tr>
<td>Sogopegu</td>
<td>1975</td>
<td>220</td>
</tr>
<tr>
<td>Matus</td>
<td>1977</td>
<td>120</td>
</tr>
<tr>
<td>Kapakamaliki</td>
<td>1975</td>
<td>112</td>
</tr>
<tr>
<td>Keya</td>
<td>1975</td>
<td>71</td>
</tr>
<tr>
<td>Duna</td>
<td>1977</td>
<td>80</td>
</tr>
<tr>
<td>Fano</td>
<td>1977</td>
<td>80</td>
</tr>
<tr>
<td>Kompafo</td>
<td>1977</td>
<td>70</td>
</tr>
<tr>
<td>Korona</td>
<td>1975</td>
<td>200</td>
</tr>
<tr>
<td>Kamaliki</td>
<td>1975</td>
<td>60</td>
</tr>
<tr>
<td>Erimosso</td>
<td>1975</td>
<td>95</td>
</tr>
<tr>
<td>Tapo</td>
<td>1975</td>
<td>65</td>
</tr>
<tr>
<td>Akwitanu</td>
<td>12.12.79</td>
<td>82</td>
</tr>
<tr>
<td>Nori Kori</td>
<td>12.12.79</td>
<td>247</td>
</tr>
<tr>
<td>Ambaura</td>
<td>12.12.79</td>
<td>70</td>
</tr>
<tr>
<td>Bonta</td>
<td>12.12.79</td>
<td>70</td>
</tr>
<tr>
<td>Arau</td>
<td>1977</td>
<td>106</td>
</tr>
<tr>
<td>Abiera</td>
<td>1975</td>
<td>30</td>
</tr>
<tr>
<td>Asafa</td>
<td>1975</td>
<td>40</td>
</tr>
<tr>
<td>Kama</td>
<td>1975</td>
<td>77</td>
</tr>
<tr>
<td>Baro-Ilda</td>
<td>12.12.79</td>
<td>200</td>
</tr>
<tr>
<td>Tudor</td>
<td>12.12.79</td>
<td>30</td>
</tr>
<tr>
<td>Arara</td>
<td>12.12.79</td>
<td>110</td>
</tr>
<tr>
<td>Korfena</td>
<td>12.12.79</td>
<td>160</td>
</tr>
<tr>
<td>Gisumonoso</td>
<td>12.12.79</td>
<td>82</td>
</tr>
<tr>
<td>Wantorifu</td>
<td>12.12.79</td>
<td>70</td>
</tr>
<tr>
<td>Kenimaro</td>
<td>12.12.79</td>
<td>110</td>
</tr>
<tr>
<td>Yanowa</td>
<td>12.12.79</td>
<td>82</td>
</tr>
<tr>
<td>Bilati</td>
<td>12.12.79</td>
<td>100</td>
</tr>
<tr>
<td>Gurimba</td>
<td>12.12.79</td>
<td>60</td>
</tr>
</tbody>
</table>

*Angco manages plantations owned by Eastern Highlands Development Corporation and Duna Coffee Estates Pty Ltd.

Table 12
AVERAGE EARNINGS IN RURAL INDUSTRIES, 1959 TO 1978

<table>
<thead>
<tr>
<th>Year</th>
<th>Chained consumer price index, 1962 = 100</th>
<th>Export price index, 1973 = 100</th>
<th>Average annual earnings, kina</th>
<th>Percentage change over previous year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Papua New Guineans</td>
<td>Expatriates</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Current prices (a)</td>
<td>Constant 1962 consumer prices</td>
</tr>
<tr>
<td>1959</td>
<td>-</td>
<td>-</td>
<td>173.8</td>
<td>-</td>
</tr>
<tr>
<td>1960</td>
<td>-</td>
<td>-</td>
<td>145.4</td>
<td>-</td>
</tr>
<tr>
<td>1961</td>
<td>-</td>
<td>-</td>
<td>157.0</td>
<td>-</td>
</tr>
<tr>
<td>1962</td>
<td>100</td>
<td>-</td>
<td>165.6</td>
<td>165.6</td>
</tr>
<tr>
<td>1963</td>
<td>99.8</td>
<td>-</td>
<td>167.7</td>
<td>168.0</td>
</tr>
<tr>
<td>1964</td>
<td>102.6</td>
<td>-</td>
<td>172.4</td>
<td>168.0</td>
</tr>
<tr>
<td>1965</td>
<td>106.7</td>
<td>-</td>
<td>172.3</td>
<td>161.5</td>
</tr>
<tr>
<td>1966</td>
<td>111.9</td>
<td>-</td>
<td>179.2</td>
<td>160.1</td>
</tr>
<tr>
<td>1967</td>
<td>114.7</td>
<td>-</td>
<td>180.0</td>
<td>156.9</td>
</tr>
<tr>
<td>1968</td>
<td>116.0</td>
<td>-</td>
<td>197.0</td>
<td>169.8</td>
</tr>
<tr>
<td>1969</td>
<td>115.6</td>
<td>-</td>
<td>201.8</td>
<td>174.6</td>
</tr>
<tr>
<td>1970</td>
<td>117.5</td>
<td>116.8</td>
<td>209.4</td>
<td>178.2</td>
</tr>
<tr>
<td>1971</td>
<td>125.1</td>
<td>112.5</td>
<td>261.6</td>
<td>209.1</td>
</tr>
<tr>
<td>1972</td>
<td>132.7</td>
<td>94.0</td>
<td>267.1</td>
<td>201.3</td>
</tr>
<tr>
<td>1973</td>
<td>143.7</td>
<td>100</td>
<td>287.7</td>
<td>200.2</td>
</tr>
<tr>
<td>1974</td>
<td>177.1</td>
<td>163.3</td>
<td>319.9</td>
<td>180.6</td>
</tr>
<tr>
<td>1975</td>
<td>195.6</td>
<td>173.9</td>
<td>430.9</td>
<td>220.3</td>
</tr>
<tr>
<td>1976</td>
<td>210.6</td>
<td>145.9</td>
<td>513.0</td>
<td>243.6</td>
</tr>
<tr>
<td>1977</td>
<td>219.9</td>
<td>277.2</td>
<td>556.8</td>
<td>253.2</td>
</tr>
<tr>
<td>1978</td>
<td>232.6</td>
<td>286.1</td>
<td>593.1</td>
<td>255.0</td>
</tr>
</tbody>
</table>

(a) Estimated from Table 3.5 using employment total (Column 4) and wage and salary payments to Papua New Guinean employees (Column 7).

(b) Current price average earnings deflated by the "product price" as measured (approximately) by the export price index excluding copper concentrate.

(c) Estimated by reducing total wage and salary and contractors' payments of K8,184 thousand by 0.8 per cent to deduct contractors' estimated payment; 0.8 per cent estimated from 1967 figures.
<table>
<thead>
<tr>
<th>COMPANY</th>
<th>1980/81 % SHARE</th>
<th>1981/82 % SHARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angco Pty Ltd</td>
<td>44.3</td>
<td>44.8</td>
</tr>
<tr>
<td>Gollin-CIL Pty Ltd</td>
<td>25.7</td>
<td>26.0</td>
</tr>
<tr>
<td>PNG Coffee Exporters Pty Ltd</td>
<td>11.0</td>
<td>10.6</td>
</tr>
<tr>
<td>Harrison &amp; Crosfield Pty Ltd</td>
<td>8.0</td>
<td>7.6</td>
</tr>
<tr>
<td>Cofex Pty Ltd</td>
<td>5.5</td>
<td>5.3</td>
</tr>
<tr>
<td>Namasu Pty Ltd</td>
<td>4.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Pacific Trading Company Pty Ltd</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Angco</td>
<td>24318.3</td>
<td>48</td>
<td>19026.3</td>
<td>41.6</td>
<td>22345.6</td>
<td>46.1</td>
<td>20785.3</td>
<td>41.4</td>
</tr>
<tr>
<td>CIL</td>
<td>10521.3</td>
<td>21</td>
<td>11978.7</td>
<td>26.2</td>
<td>12343.7</td>
<td>25.4</td>
<td>13320.4</td>
<td>26.6</td>
</tr>
<tr>
<td>PNGCE</td>
<td>3971.5</td>
<td>8</td>
<td>3973.0</td>
<td>8.7</td>
<td>6924.4</td>
<td>14.3</td>
<td>3823.6</td>
<td>7.6</td>
</tr>
<tr>
<td>H &amp; C</td>
<td>3225.4</td>
<td>7</td>
<td>3870.3</td>
<td>8.4</td>
<td>4107.1</td>
<td>8.5</td>
<td>6237.0</td>
<td>12.4</td>
</tr>
<tr>
<td>Sincof</td>
<td>5226.3</td>
<td>10.3</td>
<td>1241.9</td>
<td>2.7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cofex</td>
<td>722.1</td>
<td>1</td>
<td>3080.3</td>
<td>6.7</td>
<td>1328.7</td>
<td>3.0</td>
<td>3498.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Namasu</td>
<td>2143.9</td>
<td>4.0</td>
<td>1969.6</td>
<td>4.3</td>
<td>1052.9</td>
<td>2.1</td>
<td>1579.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Pacific Trading</td>
<td>568.6</td>
<td>2</td>
<td>514.7</td>
<td>1.1</td>
<td>352.3</td>
<td>0.7</td>
<td>511.5</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>TOTAL TONS</strong></td>
<td><strong>50698.3</strong></td>
<td><strong>100.0</strong></td>
<td><strong>45655.7</strong></td>
<td><strong>100.0</strong></td>
<td><strong>48508.6</strong></td>
<td><strong>100.0</strong></td>
<td><strong>50142.1</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Source:** CIB data supplied by exporters

1) Sincof acquired by Gollin-CIL in 1978
2) Error due to rounding and CEM 0.8 tons exported in 1976/77

### Table 15

**EXPORTERS TRADING MARGINS - 1981**

**Y GRADE**

<table>
<thead>
<tr>
<th>Export Price (FOB, PNG)</th>
<th>ANGCO</th>
<th>CIL</th>
<th>PNGCE</th>
<th>H &amp; C</th>
<th>COFEX</th>
<th>NAMASU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>169.1</td>
<td>167.1</td>
<td>170.6</td>
<td>161.9</td>
<td>165.0</td>
<td>162.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exporters margin</th>
<th>16.6</th>
<th>20.5</th>
<th>19.7</th>
<th>13.6</th>
<th>13.3</th>
<th>9.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage, handling wharf</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.0</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Levy</td>
<td>1.0</td>
<td>0.5</td>
<td>1.0</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Bank Interest</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Administration/overheads</td>
<td>7.0</td>
<td>5.4</td>
<td>5.0</td>
<td>5.0</td>
<td>6.8</td>
<td>12.0</td>
</tr>
<tr>
<td>Export Tax</td>
<td>nil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export price-DIS Lae</td>
<td>133.5</td>
<td>133.5</td>
<td>137.1</td>
<td>134.8</td>
<td>138.9</td>
<td>134.3</td>
</tr>
<tr>
<td>Freight Highlands to Port</td>
<td>4.8</td>
<td>4.8</td>
<td>4.8</td>
<td>3.0</td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prices Paid to Factories- DIS Highlands</th>
<th>130.4</th>
<th>128.4</th>
<th>132.3</th>
<th>131.8</th>
<th>136.4</th>
<th>131.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing/Admin Costs</td>
<td>15.0</td>
<td>15.0</td>
<td>15.0</td>
<td>15.0</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Processors Margin</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Factory Door Price - Green Bean</td>
<td>107.6</td>
<td>103.8</td>
<td>108.0</td>
<td>109.9</td>
<td>113.8</td>
<td>107.9</td>
</tr>
<tr>
<td>Factory Door Price - Parchment</td>
<td>80.7</td>
<td>77.8</td>
<td>81.0</td>
<td>82.4</td>
<td>85.4</td>
<td>80.9</td>
</tr>
<tr>
<td>Buyers Margin/Transport to Factory</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Roadside Price</td>
<td>68.7</td>
<td>65.8</td>
<td>69.0</td>
<td>70.4</td>
<td>73.4</td>
<td>67.1</td>
</tr>
<tr>
<td>Bounty</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Growers Price</td>
<td>78.7</td>
<td>75.8</td>
<td>79.0</td>
<td>80.4</td>
<td>83.4</td>
<td>77.1</td>
</tr>
</tbody>
</table>

1. All prices in toea per kg.

2. FOB and prices paid to factories DIS Highlands based on registered contracts June, July, August, September, 1981.

Table 16

EXPORTERS TRADING MARGINS - 1981

A GRADE

<table>
<thead>
<tr>
<th></th>
<th>ANGCO</th>
<th>CIL</th>
<th>PNGCE</th>
<th>H &amp; C</th>
<th>COFEX</th>
<th>NAMASU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Price (FOB, PNG)(^1,2)</td>
<td>196.6</td>
<td>186.4</td>
<td>187.8</td>
<td>176.5</td>
<td>188.7</td>
<td></td>
</tr>
<tr>
<td>Exporters margin</td>
<td>20.4</td>
<td>13.3</td>
<td>18.4</td>
<td>12.0</td>
<td>25.9</td>
<td></td>
</tr>
<tr>
<td>Storage, handling wharf charges</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.0</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Levy</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Bank Interest</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>Administration/overheads</td>
<td>7.0</td>
<td>5.4</td>
<td>5.0</td>
<td>5.0</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>Export Tax</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
<td></td>
</tr>
<tr>
<td>Export price-DIS Lae</td>
<td>158.9</td>
<td>158.4</td>
<td>155.1</td>
<td>151.0</td>
<td>148.5</td>
<td></td>
</tr>
<tr>
<td>Freight Highlands to Port</td>
<td>4.8</td>
<td>4.8</td>
<td>4.8</td>
<td>3.0</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>Prices Paid to Factories-DIS Highlands</td>
<td>154.1</td>
<td>153.6</td>
<td>150.3</td>
<td>148.0</td>
<td>146.0</td>
<td></td>
</tr>
<tr>
<td>Processing/Admin Costs</td>
<td>15.0</td>
<td>15.0</td>
<td>15.0</td>
<td>15.0</td>
<td>15.0</td>
<td></td>
</tr>
<tr>
<td>Processors Margin</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>Factory Door</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Green Bean</td>
<td>131.5</td>
<td>134.5</td>
<td>135.6</td>
<td>121.3</td>
<td>131.2</td>
<td></td>
</tr>
</tbody>
</table>

1. All prices in toea per kg.

2. FOB and prices paid to factories DIS Highlands based on registered contracts June, August, September, 1981.

<table>
<thead>
<tr>
<th></th>
<th>ANGCO</th>
<th>CIL</th>
<th>PNGCE</th>
<th>H &amp; C</th>
<th>COFEX</th>
<th>NAMASU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Price (FOB, PNG)</td>
<td>113.4</td>
<td>117.1</td>
<td>115.3</td>
<td>115.2</td>
<td>116.1</td>
<td>110.1</td>
</tr>
<tr>
<td>Subsidy</td>
<td>46.6</td>
<td>51.5</td>
<td>50.7</td>
<td>50.7</td>
<td>51.1</td>
<td>48.4</td>
</tr>
<tr>
<td>Exporters margin</td>
<td>5.8</td>
<td>12.8</td>
<td>5.8</td>
<td>6.4</td>
<td>2.4</td>
<td>0.15</td>
</tr>
<tr>
<td>Storage, handling wharf</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
<td>2.0</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Insurance</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Levy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank Interest</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Administration/overheads</td>
<td>8.0</td>
<td>5.4</td>
<td>5.0</td>
<td>5.0</td>
<td>6.8</td>
<td>12.0</td>
</tr>
<tr>
<td>Export Tax</td>
<td>nil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export price-DIS Lae</td>
<td>145.8</td>
<td>143.6</td>
<td>147.8</td>
<td>148.0</td>
<td>152.5</td>
<td>142.5</td>
</tr>
<tr>
<td>Freight Highlands to Port</td>
<td>4.8</td>
<td>4.8</td>
<td>4.8</td>
<td>3.0</td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Prices Paid to Factories-
DIS Highlands 141.0 139.0 143.0 145.0 150.0 140.0

<table>
<thead>
<tr>
<th>MONTH</th>
<th>WEEK OWNED</th>
<th>ANGCO TIED</th>
<th>ANGCO UNTIED</th>
<th>CIL OWNED</th>
<th>CIL TIED</th>
<th>CIL UNTIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARCH 1982</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.75</td>
<td>1.78</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1.67</td>
<td>-</td>
<td>1.76</td>
<td>1.80</td>
<td>1.68</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1.70</td>
<td>-</td>
<td>1.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>1.70</td>
<td>1.48</td>
<td>-</td>
<td>1.80</td>
<td>1.61</td>
</tr>
<tr>
<td>APRIL 1982</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.68</td>
<td>1.65</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1.66</td>
<td>-</td>
<td>1.70</td>
<td>1.63</td>
<td>1.68</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1.68</td>
<td>1.40</td>
<td>1.65</td>
<td>1.70</td>
<td>1.65</td>
</tr>
<tr>
<td>JUNE 1981</td>
<td>1</td>
<td>1.40</td>
<td>-</td>
<td>1.40</td>
<td>1.51</td>
<td>1.45</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1.32</td>
<td>-</td>
<td>1.35</td>
<td>1.00</td>
<td>1.40</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1.33</td>
<td>-</td>
<td>1.31</td>
<td>1.38</td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1.27</td>
<td>-</td>
<td>1.35</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JULY 1981</td>
<td>1</td>
<td>1.25</td>
<td>-</td>
<td>1.26</td>
<td>1.30</td>
<td>1.26</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1.27</td>
<td>-</td>
<td>1.26</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.28</td>
<td>1.25</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1.34</td>
<td>1.12</td>
<td>-</td>
<td>1.29</td>
<td>1.29</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>1.40</td>
<td>1.32</td>
</tr>
<tr>
<td>AUGUST 1982</td>
<td>1</td>
<td>1.40</td>
<td>1.36</td>
<td>-</td>
<td>1.33</td>
<td>1.33</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1.37</td>
<td>1.38</td>
<td>1.36</td>
<td>1.40</td>
<td>1.30</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1.34</td>
<td>1.39</td>
<td>1.34</td>
<td>1.30</td>
<td>1.35</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1.34</td>
<td>1.34</td>
<td>1.34</td>
<td>1.15</td>
<td>1.30</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>1.31</td>
<td>1.11</td>
<td>1.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEPTEMBER 1982</td>
<td>1</td>
<td>1.33</td>
<td>-</td>
<td>1.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1.35</td>
<td>-</td>
<td>1.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1.35</td>
<td>-</td>
<td>1.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1.36</td>
<td>-</td>
<td>1.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>1.36</td>
<td>-</td>
<td>1.41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 19

FACTORY OWNERSHIP AND PRODUCTION 1980/81

<table>
<thead>
<tr>
<th>Ownership Category</th>
<th>National Groups &amp; Govt Councils</th>
<th>Other Exporters</th>
<th>Expatriates</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating No.</td>
<td>12.5\textsuperscript{2}</td>
<td>4</td>
<td>8</td>
<td>5.5\textsuperscript{2}</td>
</tr>
<tr>
<td>Registered Prod\textsuperscript{n}</td>
<td>8160</td>
<td>4880</td>
<td>7913</td>
<td>11334</td>
</tr>
<tr>
<td>Factories %</td>
<td>18</td>
<td>10</td>
<td>17</td>
<td>24</td>
</tr>
</tbody>
</table>

| Registered No.     | 3                               | 2              | -           | 1     | 2    | 8    |
| Factories Prod\textsuperscript{n} | 1084 | 404 | - | 1170 | 769 | 3423 |
| Operating but not buying % | 2 | 1 | - | 3 | 2 | 7 |

| Unregistered Prod\textsuperscript{n} | 1075 | - | 154 | 1086 | 728 | 3043 |
| %                                 | 2 | - | 0.3 | 2 | 2 | 7 |

| Total No.           | 23.5\textsuperscript{2} | 6              | 9           | 16    | 15.5\textsuperscript{2} | 70 |
| Total Prod\textsuperscript{n} | 10319 | 5284 | 8067 | 13590 | 9447 | 46711 |
| %                   | 22 | 11 | 17 | 29 | 20 | 100 |

1. Three unregistered factories owned by missions and a special purpose institute are grouped with the expatriate category.

2. One factory was owned by an expatriate company in partnership with a local group.

Source: Hassall and Associate (1982)
### TABLE 20. RATIO OF FACTORY DOOR PRICE (GREEN BEAN) TO EXPORT PRICE (FOB, PNG)

#### Y Grade - 1981

<table>
<thead>
<tr>
<th></th>
<th>ANGCO</th>
<th>CIL</th>
<th>PNGCE</th>
<th>H &amp; C</th>
<th>COFEX</th>
<th>NAMASU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory Door Price (Green Bean)</td>
<td>107</td>
<td>103</td>
<td>109</td>
<td>113</td>
<td>107</td>
<td></td>
</tr>
<tr>
<td>Export Price</td>
<td>169</td>
<td>167</td>
<td>170</td>
<td>161</td>
<td>165</td>
<td>162</td>
</tr>
<tr>
<td>Ratio</td>
<td>63%</td>
<td>62%</td>
<td>64%</td>
<td>68%</td>
<td>68%</td>
<td></td>
</tr>
</tbody>
</table>

#### A Grade - 1981

<table>
<thead>
<tr>
<th></th>
<th>ANGCO</th>
<th>CIL</th>
<th>PNGCE</th>
<th>H &amp; C</th>
<th>COFEX</th>
<th>NAMASU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory Door Price (Green Bean)</td>
<td>131</td>
<td>134</td>
<td>135</td>
<td>121</td>
<td>132</td>
<td>-</td>
</tr>
<tr>
<td>Export Price</td>
<td>196</td>
<td>186</td>
<td>187</td>
<td>176</td>
<td>188</td>
<td>-</td>
</tr>
<tr>
<td>Ratio</td>
<td>67%</td>
<td>72%</td>
<td>73%</td>
<td>69%</td>
<td>70%</td>
<td>-</td>
</tr>
</tbody>
</table>

**Source:** Hassall and Associates (1982).
Table 21
Coffee: Prices to growers and unit values of exports, 1980
(US cents per lb or green bean equivalent)

<table>
<thead>
<tr>
<th></th>
<th>Producer's price</th>
<th>Unit value of exports (f.o.b.)</th>
<th>Producer's price as percentage of unit value of exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US cents/lb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombian milds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>83.13</td>
<td>163.83</td>
<td>50.7</td>
</tr>
<tr>
<td>Kenya</td>
<td>158.74 a/</td>
<td>172.45 a/</td>
<td>92.0</td>
</tr>
<tr>
<td>United Rep. of Tanzania</td>
<td>73.74 b/</td>
<td>144.48 b/</td>
<td>51.0</td>
</tr>
<tr>
<td>Other milds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td>92.16 a/</td>
<td>148.07 a/</td>
<td>62.2</td>
</tr>
<tr>
<td>Dominican Rep.</td>
<td>127.46 a/</td>
<td>164.02 b/</td>
<td>77.7</td>
</tr>
<tr>
<td>Ecuador</td>
<td>93.09</td>
<td>108.26</td>
<td>86.0</td>
</tr>
<tr>
<td>El Salvador</td>
<td>77.82</td>
<td>156.46</td>
<td>49.7</td>
</tr>
<tr>
<td>Guatemala</td>
<td>98.21</td>
<td>160.75</td>
<td>61.1</td>
</tr>
<tr>
<td>Honduras</td>
<td>102.36 a/</td>
<td>135.16 a/</td>
<td>75.7</td>
</tr>
<tr>
<td>India</td>
<td>83.94 b/</td>
<td>145.82 b/</td>
<td>57.6</td>
</tr>
<tr>
<td>Mexico</td>
<td>109.30</td>
<td>160.80</td>
<td>68.2</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>117.94</td>
<td>162.60</td>
<td>72.5</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>95.07</td>
<td>158.14</td>
<td>60.1</td>
</tr>
<tr>
<td>Peru</td>
<td>111.05</td>
<td>144.07</td>
<td>76.7</td>
</tr>
<tr>
<td>Unwashed Arabicas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>68.60</td>
<td>137.75</td>
<td>49.9</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>58.52</td>
<td>162.87</td>
<td>35.9</td>
</tr>
<tr>
<td>Robustas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angola</td>
<td>48.52</td>
<td>159.90</td>
<td>30.3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>67.37</td>
<td>124.03</td>
<td>54.3</td>
</tr>
<tr>
<td>OAMCAF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameroon</td>
<td>57.08</td>
<td>149.73</td>
<td>44.8</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>64.40</td>
<td>153.26</td>
<td>42.0</td>
</tr>
<tr>
<td>Madagascar</td>
<td>45.36</td>
<td>137.52</td>
<td>33.0</td>
</tr>
<tr>
<td>Uganda</td>
<td>85.54</td>
<td>140.71</td>
<td>60.8</td>
</tr>
<tr>
<td>Zaire</td>
<td>48.60</td>
<td>93.45</td>
<td>52.0</td>
</tr>
</tbody>
</table>

### TABLE 22. PURPOSE FOR USE OF DPI

<table>
<thead>
<tr>
<th>Purpose</th>
<th>% of total users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan assistance</td>
<td>10</td>
</tr>
<tr>
<td>Marketing/Commodity Data</td>
<td>12</td>
</tr>
<tr>
<td>Procurement of Materials</td>
<td>45</td>
</tr>
<tr>
<td>Technical Services</td>
<td>69</td>
</tr>
<tr>
<td>Field Trials</td>
<td>12</td>
</tr>
<tr>
<td>Solving Problems</td>
<td>24</td>
</tr>
<tr>
<td>Doing Research</td>
<td>14</td>
</tr>
</tbody>
</table>

**SOURCE:** McKillop, Williamson and Associates Pty. Ltd. (1982).

---

### TABLE 23. USE OF 3 SERVICES (all DPI users) BY AGRICULTURAL ACTIVITY (%)

<table>
<thead>
<tr>
<th>Agricultural Activity</th>
<th>Market/Commodity</th>
<th>Materials</th>
<th>Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee</td>
<td>12</td>
<td>50</td>
<td>38</td>
</tr>
<tr>
<td>Copra/Cocoa</td>
<td>6</td>
<td>53</td>
<td>40</td>
</tr>
<tr>
<td>Rubber</td>
<td>50</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>Extensive Livestock</td>
<td>-</td>
<td>12</td>
<td>75</td>
</tr>
<tr>
<td>Intensive Production</td>
<td>25</td>
<td>-</td>
<td>75</td>
</tr>
<tr>
<td>Management/Services</td>
<td>50</td>
<td>17</td>
<td>83</td>
</tr>
</tbody>
</table>

**SOURCE:** McKillop, Williamson and Associates Pty. Ltd. (1982).
<table>
<thead>
<tr>
<th>Table 24</th>
<th>Actual Tasks Undertaken by Extension Workers (% of time)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural Devt. Officer</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
</tr>
<tr>
<td>Supervising staff</td>
<td>9.24</td>
</tr>
<tr>
<td>Writing reports</td>
<td>6.42</td>
</tr>
<tr>
<td>Writing letters</td>
<td>5.20</td>
</tr>
<tr>
<td>Staff meetings</td>
<td>4.33</td>
</tr>
<tr>
<td>Training staff</td>
<td>1.36</td>
</tr>
<tr>
<td>Other administration tasks</td>
<td>19.81</td>
</tr>
<tr>
<td>Sub Total</td>
<td>46.36</td>
</tr>
<tr>
<td>Farmer Services</td>
<td></td>
</tr>
<tr>
<td>Advising farmers</td>
<td>8.10</td>
</tr>
<tr>
<td>Training farmers</td>
<td>2.79</td>
</tr>
<tr>
<td>Produce inspection</td>
<td>0.46</td>
</tr>
<tr>
<td>Delivering farm materials</td>
<td>4.63</td>
</tr>
<tr>
<td>Buying produce</td>
<td>1.51</td>
</tr>
<tr>
<td>Other services for farmers</td>
<td>3.30</td>
</tr>
<tr>
<td>Sub total</td>
<td>20.79</td>
</tr>
<tr>
<td>Development Bank</td>
<td></td>
</tr>
<tr>
<td>Interviewing farmers for loans</td>
<td>2.08</td>
</tr>
<tr>
<td>Budgeting</td>
<td>1.30</td>
</tr>
<tr>
<td>Bank reports</td>
<td>1.60</td>
</tr>
<tr>
<td>Administration of loans</td>
<td>2.28</td>
</tr>
<tr>
<td>Sub total</td>
<td>7.26</td>
</tr>
<tr>
<td>Gaining Knowledge</td>
<td></td>
</tr>
<tr>
<td>Reading technical material</td>
<td>1.98</td>
</tr>
<tr>
<td>Attending training courses</td>
<td>1.30</td>
</tr>
<tr>
<td>Data collection</td>
<td>1.63</td>
</tr>
<tr>
<td>Sub total</td>
<td>4.91</td>
</tr>
<tr>
<td>Production of Crops and Livestock</td>
<td></td>
</tr>
<tr>
<td>Growing crops</td>
<td>1.68</td>
</tr>
<tr>
<td>Raising livestock</td>
<td>2.30</td>
</tr>
<tr>
<td>Fish production</td>
<td>0.01</td>
</tr>
<tr>
<td>Sub total</td>
<td>3.99</td>
</tr>
<tr>
<td>Travel</td>
<td></td>
</tr>
<tr>
<td>Road travel</td>
<td>13.86</td>
</tr>
<tr>
<td>Walking</td>
<td>1.16</td>
</tr>
<tr>
<td>Boat travel</td>
<td>1.46</td>
</tr>
<tr>
<td>Air travel</td>
<td>0.01</td>
</tr>
<tr>
<td>Sub total</td>
<td>16.49</td>
</tr>
<tr>
<td>Total</td>
<td>99.98</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last Wednesday of period</th>
<th>Coffee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>6.8</td>
</tr>
<tr>
<td>1977</td>
<td>46.4</td>
</tr>
<tr>
<td>1978</td>
<td>63.6</td>
</tr>
<tr>
<td>1979</td>
<td>83.8</td>
</tr>
<tr>
<td>1980</td>
<td>94.9</td>
</tr>
<tr>
<td>1979 March 28</td>
<td>63.6</td>
</tr>
<tr>
<td>1979 June 27</td>
<td>65.0</td>
</tr>
<tr>
<td>1979 September 26</td>
<td>75.3</td>
</tr>
<tr>
<td>1979 December 24</td>
<td>83.8</td>
</tr>
<tr>
<td>1980 March 26</td>
<td>86.4</td>
</tr>
<tr>
<td>1980 June 25</td>
<td>89.5</td>
</tr>
<tr>
<td>1980 September 24</td>
<td>94.0</td>
</tr>
<tr>
<td>1980 December 31</td>
<td>94.9</td>
</tr>
</tbody>
</table>

**SOURCE:** Bank of Papua New Guinea, Port Moresby, Quarterly Economic Bulletins.
Procedures to be followed when applying for a loan under the Coffee Development Scheme -

1. Blocks to be considered must be of area 15 hectares and over. It is possible to have two (or more) geographically separate blocks (each less than 15ha, but totalling at least 15ha.)

2. All interested groups must approach the Department of Primary Industries in Goroka (Kevin Murray - Coffee Development Section) and have them inspect the site for suitability (as to whether coffee can be grown) as well as have them carry out a preliminary survey to establish the likely size of the block.

3. DPI will advise the group of their requirements for business registration and then send them to the Office of Business Development where the process of registering their Business Group, or Company, will be started.

4. DPI will then forward their recommendation to District Services Goroka (showing Business Group, or Company, application fee receipt, group name, chairmans name, village, and copy of their preliminary survey plan). A copy will be sent to the Development Bank.

5. The applicant must then approach District Services Goroka (Daryl Woodward at Provincial Office, North Goroka) and fill out an application form (and pay a fee of K10).

6. District Services will then request that Lands Goroka conducts a Survey. If the applicant wishes to have a private survey carried out they should at this stage give a copy of it to Lands Goroka.

7. The Survey will be drawn up in Goroka and held. Periodically a draftsman from Lands Waigani will visit Goroka and check these Surveys for accuracy.

8. The Development Bank will be shown the application and approved Survey and will make their recommendations from these.

9. The Survey, application, and Development Bank recommendation will be forwarded together to Lands Waigani where they will open a file on the Project.

10. District Services will have a preliminary Land Investigation Report compiled at this stage, while waiting for Lands Waigani to issue an investigation Instruction. A copy of this Report will be released to the Development Bank if it shows there is no dispute over ownership of the land.

11. When the Development Bank has satisfied itself that all steps have been completed one of the Management Agencies will be asked to undertake the Project (if they haven't already become involved).
Table 26 (cont.)

12. Once the Investigation Instruction has been received from lands Waigani the other copies will be forwarded to the respective Departments and the process of preparing the lease will start.

13. The Development Bank will release funds according to their guidelines.

Drawn up or discussed in a meeting at Lands Department Office, Goroka. 9th April 1981.
Figure 6: PROCEDURAL CHART

MANAGEMENT AGENCY
IN VolVEMENT FROM THE BEGINNING

CLAN LAND
OWNER(S)

GROUP INCORPORATION
REGISTRATION OF BUSINESS GROUP
DEPT. OF COMMERCE

DEPT OF PROVINCIAL AFFAIRS
LAND INVESTIGATION

DPI
PROJECT IDENTIFICATION
or LOCATION ASSESSMENT

MANAGEMENT AGENCY
PROJECT EVALUATION
LOAN PROPOSAL TO PNGDB

MANAGEMENT AGENCY
SUPERVISION OF SWEAT EQUITY

PNGDB
LOAN REQUEST

DEPARTMENT OF LANDS
SURVEY AND VALUATION
ISSUE OF TITLE

DEPT. OF LANDS
LEASE/LEASE BACK
ARRANGEMENTS

PNGDB
PROCESSING LOAN PROPOSAL
PROJECT FUNDING

Funds

MANAGEMENT AGENCY
PROJECT SUPERVISION
<table>
<thead>
<tr>
<th>AGENCY</th>
<th>BUSINESS GROUP NAME AND SIZE</th>
<th>NO. IN BUSINESS GROUP</th>
<th>LOAN AMOUNT</th>
<th>NO. OF FULL-TIME LABOURERS</th>
<th>MANAGER:PROJECT RATIO</th>
<th>NO. OF TREES PLANTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANGCO</td>
<td>Arusafa, 18.1ha</td>
<td>58</td>
<td>K73,000</td>
<td>6</td>
<td>1:5</td>
<td>2000/ha</td>
</tr>
<tr>
<td></td>
<td>Molan, 18ha</td>
<td>62</td>
<td></td>
<td>Business group leader did not know</td>
<td>6</td>
<td>Full Time Assistant</td>
</tr>
<tr>
<td></td>
<td>Megusa, 30ha</td>
<td>50</td>
<td></td>
<td>Business group leader did not know</td>
<td>10 (early planting)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Safakofi, 19.2ha</td>
<td>60</td>
<td></td>
<td>8 (early planting)</td>
<td>Full Time</td>
<td>3600/ha</td>
</tr>
<tr>
<td>NGC</td>
<td>Nipizaleka, 20ha</td>
<td>8</td>
<td></td>
<td>1:9</td>
<td>1300-1500ha</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kerafa, 20ha</td>
<td>8</td>
<td></td>
<td>1:9</td>
<td>1300-1500/ha</td>
<td></td>
</tr>
<tr>
<td>GOUNA</td>
<td>Gelesenemeka, 18.74ha</td>
<td>30</td>
<td></td>
<td>Business group leader did not know</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Namauka, 16ha</td>
<td>32</td>
<td></td>
<td>Business group leader did not know</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kaminarepa, 20ha</td>
<td>14</td>
<td>K78,000</td>
<td>Twice a week visits</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Guminaufa, 24ha</td>
<td>10</td>
<td>K78,000</td>
<td>Once a week visits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 28
Coffee - RECOVERY RATES

1 kg Fresh Coffee Cherries = 0.18 kg parchment coffee
= 0.15 kg green coffee beans

1 kg parchment coffee = 0.83 kg green coffee beans
(largeholdings)
= 0.80 kg green coffee beans
(used by the Tariff Board)
= 0.70 kg green coffee beans

1 kg green coffee beans = 0.84 kg roasted coffee
= 0.33 kg soluble (instant) coffee

1 kg soluble (instant) coffee
= 3.00 kg green coffee beans

1 tonne green coffee beans = 17 bags @ 60 kg net

BOOKS AND JOURNAL ARTICLES


Aland, F.P. 'Land Tenure, Settlement and Land Usage' in B. Densley (Ed.) Agriculture in the Economy Volume 1 Department of Primary Industry, Port Moresby.


Banaji, J. (1977) 'Modes of Production in a Materialist Conception of History' Capital and Class 3.


Boschen, G. (1978) 'West German Consumption Stays Stable' Coffee International 5 (2).


Downs, I. (1964) 'The Story Behind the Quota Increase' New Guinea Highlands Bulletin April.


Gallagher, K. (1977) 'Taking a Cautious Look at the Future' 
Coffee International 4 (2).

Development: Peasants, International Capital and the State 
State University of New York Press, Albany.

Galloway, T. (1973) The International Coffee Agreement Journal of 
World Trade Law 7.

J. Ballard (Ed.) Policy-Making in a New State University of 
Queensland Press, St Lucia.

Geer, T. (1971) An Oligopoly - The World Coffee Economy and 
Stabilization Schemes Dunellen, New York.

Gerhard, H.W. (1963) 'Commodity Trade Stabilization Through 
International Agreements' Law and Contemporary Problems 28 
(2).

Papua New Guinea: Towards a Political Economy of the Terminal 
Peasantry' in R. Gerritsen, R.J. May, and M.A.H.B. Walter 
Road Belong Development: Cargo Cults, Community Groups and 
Self-Help Movements in Papua New Guinea, Working Paper No. 3, 
Department of Political and Social Change, Research School of 
Pacific Studies, Australian National University, Canberra.

Gittins, M.B. (1978) 'London Futures Market - The Philosophy and 
the Operation' Coffee International 5 (1).

12 (1).

Book Co., Sydney.

Goldsworthy, D. (1983) 'Political Analysis and Development 
Studies' Politics 18 (1).

London.

Good, K. (1979) 'The Class Structure' in A. Amarshi, K. Good and 
R. Mortimer Development and Dependency: The Political Economy 
of Papua New Guinea Oxford University Press, Melbourne.

in PNG - Coffee Production in the Eastern Highlands 
Occasional Paper No. 1, Institute of PNG Studies, Boroko.

Capitalist Development and Agrarian Transitions Basil 
Blackwell, Oxford.

New Guinea: An Independent Review Development Studies Centre, 
Australian National University, Canberra.


Grossman, L.S. (n.d.) 'From Subsistence Affluence to Subsistence Malaise: Cash Cropping and the Subsistence System in the Highlands of PNG' History of Agriculture Discussion Paper No. 46 Department of Primary Industry University of PNG.


Heinz, K. (1979) 'Notable German Increase' Coffee International 6 (3).


Kesselman, M. (1973) 'Order or Movement? The Literature of Political Development as Ideology' World Politics 26 (1).


Kirschen, L. (1977) 'When the Bonanza Comes to an End' *Coffee International* 4 (2).


Kirschen, L. (1979) 'Is There the Will to Cope With Yet Another Crisis?' *Coffee International* 6 (3).


Papua New Guinea Department of Primary Industry (1977) *Farming Notes - Arabica Coffee*, Department of Primary Industry, Port Moresby.


Papua New Guinea Coffee, Port Moresby.


Pasingan, E. Brief Report on Eastern Highlands Province, 15 October 1981, Department of Decentralisation, Legal and Corporate Services Unit, Port Moresby.


Samoff, J. (1982) 'Class, Class Conflict and the State in Africa' Political Science Quarterly 97 (1).


Standish, B. (1978) 'So Far What Have We Learned' *Post Courier* October 2.


Standish, B. (1983) 'Power to the People, Decentralization in Papua New Guinea' *Public Administration and Development* 3 (3).


Sunkel, O. (1972) 'Big Business and Dependencia' Foreign Affairs 50 (3).

Tammur, O. (1976) 'How We'll Divide the Taxes' Post Courier November 3.

Tariff Board - Australia (1965) Inquiry Re Coffee.


White, A. (1977) Possible Organisations of the Cattle Industry, paper presented to a Department of Primary Industry Seminar on developing the Cattle Industry, Port Moresby.


INTERVIEWS

Interviews were conducted in Port Moresby and Goroka, Papua New Guinea from April to August 1982.

Officers were interviewed from the following departments, government agencies and private companies:

ANGCO Pty Ltd
Coffee Industry Board
Department of Commerce
Department of Decentralisation
Department of Finance
Department of Lands,
Department of Primary Industry (National)
Eastern Highlands Provincial Government
Gouna Development Corporation
Hassall and Associates Pty Ltd
National Planning Office
National Plantation Management Agency
Papua New Guinea Development Bank

Interviews were also held with electoral candidates standing in the 1982 Goroka Open electorate and with business group members on 20-hectare coffee development projects.

ARCHIVES AND FILES CONSULTED included

ANGCO Pty Ltd - Project Budgets
Department of Commerce, Goroka - Business Group Legislation
Department of Lands - File 68/1996
Department of Primary Industry, Port Moresby
Eastern Highlands Provincial Government
  - Cabinet Submissions
  - Eastern Highlands Provincial Government Budget
  - Rural Land Development Grant, File 8-6-8
  - Agricultural Policy, Coffee, File 27-1-3
National Plantation Management Agency - Project Budgets
Papua New Guinea Development Bank
  - Project Requests for Loan Progress Payments
PERIODICALS CONSULTED included

The Age
Australian Financial Review
Bank of Papua New Guinea Quarterly Economic Bulletin
Business Week
Coffee International
Daily News Brief (PNG)
Department of Finance Quarterly Summary of Economic Conditions (PNG)
FAO Production Yearbook
International Coffee Organisation Quarterly Statistical Bulletin on Coffee
Household Expenditure Survey 1975/76 (PNG)
National Parliament Debates (PNG)
New Guinea Highlands Bulletin
Papua New Guinea Times
Post Courier
Reserve Bank of Australia Quarterly Statistical Bulletin
Rural Industries Bulletin (PNG)
Summary of Statistics (PNG)
South