USE OF THESSES

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THE RESOURCE FRONTIER STRATEGY IN PENINSULAR MALAYSIA: CASE STUDIES OF THE PAHANG TENGGARA AND KESEDAK REGIONS

By
WONG Tai Chee

A Thesis Submitted for the Degree of Doctor of Philosophy at the Australian National University

September 1989
Declaration

Except where otherwise indicated,
this thesis is my own work.

WONG Tai Chee
September 1989
Acknowledgement

I am grateful to many people who had assisted me in the course of preparing the thesis. Their names are too numerous to be all mentioned here. In particular, I wish to express my thanks to the Research School of Pacific Studies for the scholarship, Professor Harold Brookfield for his guidance during the initial stage, Dr Peter Rimmer and Dr John Overton for their patient and critical supervision, and Dr Dean Forbes for his invaluable advice. Other members of the Department of Human Geography as well as the Research School of Pacific Studies have also provided me with needed assistance. Appreciation for cartographic assistance and advice is also due to Keith Mitchell, Dr John Overton, Merv Commons and Dr Bryant Allen will also be remembered for their help in the word processing.

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Abstract

The thesis examines the application of Western urban-industrial growth pole theory to the frontier zones of the developing countries and, in particular, to the Malaysian regions of Pahang Tenggara and Kesed. The study begins by tracing the origins of the growth pole theory after the Second World War when the West urgently needed to initiate growth in the developing world as a means of countering Soviet expansion. In response to this political imperative, economists and geographers formulated concepts to guide growth across space – the basic ingredients of growth pole theory. When the theory was applied to the frontier regions of developing countries, various forms of resource frontier strategies emerged under the sponsorship of the respective national governments. The initial applications were in South America during the early 1960s, but the resource frontier strategy has been also incorporated as part of Malaysia’s New Economic Policy since 1970 to bolster Malay urbanisation and reduce regional disparity. Unlike South America, however, the 'propulsive force' hinged upon oil palm and rubber. As these commodities are strongly tied to the world market and relatively little value-added is created within the producing regions, they serve the interests of national metropolitan centres rather than local settlements. Consequently, little urbanisation has been achieved in the regions such as Pahang Tenggara and Kesed. Assessed against the twin objectives of the New Economic Policy, the two frontier regions have not boosted Malay urbanisation nor reduced regional inequality to any significant extent. Nonetheless, most settlers of the Federal Land Development Authority have improved their standards of livings since moving. Yet, the benefits have been restricted to first generation settlers because few non-agricultural jobs have been created. When they enter the labour market, most youth are expected to move to metropolitan centres for jobs. Hence, industrialisation in major centres is the key to their absorption and Malaysia's future development in the next twenty years.
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INTRODUCTION

... social development has been continuously beginning over again on the frontier. This-perennial rebirth, this fluidity of life, this expansion ... with its new opportunities, its continuous touch with the simplicity of primitive society, furnish the forces of dominating [national] character' (Frederick Turner, 1920:2-3).

The American frontier, to many people, was a place where cowboys and Indians fought battles that epitomised the struggle between 'civilisation' and 'savagery'. Yet, the frontier also captured the attention of a generation of American historians and geographers (Turner, 1920; Bowman, 1931) because it was an area where new opportunities were open to those who could exploit the relatively easily won resources. While the American frontier of spontaneous settlers did not survive the 1930s, new frontiers emerged elsewhere.

After the Second World War, newly-independent countries captured the interest of international economists and geographers. Through their collective efforts, they sought to transform new frontiers into regions of opportunities with their growth theories. These efforts were heightened when Friedmann recognised 'resource frontiers' as a key element in a conceptual framework for regional planning in Venezuela. Subsequently, these 'zones of new settlements in which virgin territory is occupied and made productive' were incorporated in formal regional planning arrangements of many developing countries (Friedmann, 1966:42). Buoyed by Friedmann's theories, resource frontiers have evolved into a planned environment infused with socio-political objectives. Increasingly, the state has acted as the prime developer of the frontiers, replacing spontaneously settled individuals as they normally did in the past.

In studying resource frontier strategy, two key issues arise: why study it; and how does it fit into the broad development literature? These questions have been at the core of post-war development studies. Undeniably, resource frontiers are an inseparable part of the pursuit of modernisation in a great number of developing countries. Their appearance
away from established zones or cities has only modified the form of that pursuit, but not its contents. In a different way, the resource frontier strategy represents a transplant of Western development theories to developing nations which lack indigenous concepts. In the process, as shown in most aid programs, the intermediaries have been the international aid agencies and their international or local consultants.

As research on the application of theories needs empirical evidence to either justify the action of the state or serve as a basis for later readjustment, there is a need to investigate the cause and consequence of the implementation of theories. In Malaysia, there has been some research conducted on either administrative frameworks of resource frontier strategies or about socio-economic changes experienced by FELDA settlers. Yet, the examination of changes in the livelihood of settlers has not been conclusive. Nor has the response of settlers to the regional policy of rural urbanisation been tackled based on their capacity to adapt to a new livelihood in accordance with their income levels. This thesis aims to fill such a gap and its combines macro-level analysis of the national strategy of resource frontier development with micro-level descriptions of the lives of settlers. The interaction between super-imposed state objectives and the spontaneous response of settlers can, therefore, reflect the shortcomings of both public policies and their theoretical bases. To study such interaction, empirical details of settler livelihoods, based on household surveys in two frontier settlements – Bandar Tun Razak and Ciku – are presented. Key research questions in relation to a broad regional development framework, however, form the backbone of the thesis.

Research Questions

The thesis raises the fundamental issue as to when, where, why and how the growth pole or growth centre concept\(^1\) was exported from the developed world for

\(^1\) A distinction between growth pole and growth centre must be made. The growth pole refers to existing or newly created urban centres where economic growth, theoretically speaking, hinges upon industry as the main propulsive force. It is sometimes also called a development pole. Conversely, 'growth centre' has been used more flexibly since the 1960s. It varies from a major city of national importance (with services as the most prominent source of employment) to rural centres in the remote
application in the remote frontiers of developing countries. In providing an interpretive approach, we trace the origins of this concept and its being incorporated into resource frontier strategy, study how it was adaptively applied and, finally examine the consequences in Malaysia. The argument is structured into three parts and eight chapters. A series of key questions are raised and tackled throughout the study.

**Thesis Structure**

Key questions of Part I are: when and where did resource frontier strategies originate; and why were they applied in South America and Malaysia? Accordingly, it undertakes an examination of the evolution of resource frontier strategies from the search for growth theory immediately after the war to the application of the theory over space.

Chapter 1 considers the concern of the West with the economic development of developing nations. Consequently, growth theories were formulated to lead the latter towards modernisation. Because of different backgrounds, these urban-based theories were adapted to suit the needs of developing countries which had a weak industrial base but were rich in natural resources. Hence, the resource frontier strategy was conceived in the early 1960s.

Chapter 2 turns to the first application of the resource frontier strategy in South America, taking Brazil and Venezuela as case studies. Attention is focused on why they adapted the strategy differently. Because of the diversity in approach, settlers in Brazil's Amazonia and Venezuela's Guayana had a varied experience. A comparative study is made on the application of the strategy in these two countries.

Chapter 3 shifts from South America to Malaysia as the strategy further evolved across the developing world. Highlighting the complex post-war situation in Malaya, the political economy of the country is initially discussed. Social unrest and rural poverty eventually gave rise to a strongly cohesive ethnic-based political party (United Malays
National Organisation – UMNO). In search of popular electoral support, the UMNO-led government, since 1970, used the resource frontier strategy to boost urbanisation as a means of creating a strong Malay middle class and reducing regional disparity. Consequently, a series of regional development authorities were established to facilitate the implementation of the strategy.

With this background, we proceed to Part II by asking: how has the resource frontier strategy been applied in Malaysia under the New Economic Policy; what have been the results? Concentrating on the application of resource frontier strategy in Peninsular Malaysia, empirical evidence collected from the case studies of two frontier regions – Pahang Tenggara and Kesed (South Kelantan) (Figure 0.1) is used. Chapter 4 studies the actual practice of the strategy within a prescribed national planning hierarchy. Attention is centred on the role of the regional planner in each region, including his relationship with the Ministry of Land and Regional Development and officials at settlement level for implementation. A comparative study is undertaken, drawing identical and different features in the planner’s conduct and duty performance. Field observations, interviews and investigation of government reports constitute the main component of the chapter. From the interviews, a clear picture about the implementation process of the resource frontier strategy was acquired.

Chapters 5 and 6 are devoted to FELDA settlers who were the main actors of the Malaysian frontiers. The central theme is to enquire whether settlers have improved their living standards while undergoing livelihood changes and, how they adapt themselves to the new environment. Field investigations were conducted on two FELDA oil-palm based settlements: Bandar Tun Razak in Pahang Tenggara and Ciku in Kesed. They were at two different stages of development and were chosen to provide a contrasted picture of settlers’ livelihood. Extensive travel and observations were made in the course of data collection. Virtually all settlements within the two regions were visited and discussions with local residents were held.
Figure 0.1: Regions of Study: Pahang Tenggara and Kesedar

Source: Fieldwork.
Based on the field data, Chapter 5 provides an overview of changes in various economic aspects as experienced by settlers in Bandar Tun Razak and Ciku. Indices of data encompass motives of resettlement, change in income levels, expenditure patterns, possessions of consumer durables, occupational structure and land size. In ending, the fragility of settlers' improved standards of living is examined in light of the marked fluctuation of commodity prices within the current world exchange system.

Chapter 6 is devoted to the evolution of social environment of settlers. Initially, the perception of change is verified against aspects like housing, local access to social facilities, marketing and education, and regional access in terms of public transport. From the mobility of settlers, a landscape of how and where settlers meet their daily needs is shaped. But this is not complete without examining the second generation issue. Data for Chapters 5 and 6 are based on survey methods undertaken in Bandar Tun Razak and Ciku and were collected in the following manner.

Bandar Tun Razak and Ciku differed substantially in population size – Bandar Tun Razak had about 3,200 households whereas Ciku (consisting of Ciku 1 and 2) had only 720 households. Given the high degree of homogeneity of settlers who have become oil palm workers after resettlement, it was esteemed that a 3 per cent sample size was adequate for the survey. Nonetheless, to make computation easier for a comparative study, identical number of households was taken for the two schemes. Consequently, one hundred households were surveyed in each settlement, with Ciku having a higher density of sample than Bandar Tun Razak. In selecting the households, the following features were considered to ensure a varied background:

(a) Place of origin, age and occupation;
(b) Some women household heads, either widows or divorcees, the purpose being to examine how they handled the 'tough' task of oil palm harvesting, normally done by men; and
(c) Non-Malay settlers to reflect views expected to be different from Malay settlers who made up almost 98 per cent in Bandar Tun Razak. In Ciku however, Malays constituted 100 per cent of the settlers.

Before starting the questionnaire survey, a location map of both selected settlements showing house numbers were studied against background information of settlers obtained from the FELDA office. Based on selection criteria, the chosen houses were then marked on the maps. As settlers must go to the field during the harvest periods (twice a month and three to five days each time), appointments were made with those who were bound by this obligation. Thus, interviews were held at night where necessary. Most settlers received their principal income from oil palm yields. Hence, reliable data on the main source of income were able to be collected as they were taken directly from local FELDA office records. Income from secondary occupation and that of the children, however, had to be dependent upon oral responses. Before leaving the study area, data considered unreliable were either rechecked with the interviewees or with their neighbours. This often brought more satisfactory results. Interviews with household heads were conducted at home. Details of the questionnaire survey are given in Appendix 0.1.

Throughout the fieldwork between early of October 1987 and end of March 1988, interviews with government planners and administration officials in Kuala Lumpur and local state offices were also conducted. Other observations concerning local commercial activities and settlers' livelihood were also made.

This leads us to a subsequent assessment of the consequences of the resource frontier strategy in Part III where our focus is turned to answering: what lessons can be drawn from the Malaysian experience; what are the other alternatives for the next twenty years? Attention is concentrated on evaluating the results of applying the resource frontier strategy in Pahang Tenggara and Kesedar between 1970 and 1985 against the prime objectives of the New Economic Policy. In light of the lessons, further discussion of
development alternatives is undertaken. Basically, assessment criteria in Chapter 7 are based on targets set by the Master Plans and the achievement made in terms of the pace of population growth, industrial development and reduction in regional disparity. Subsequently, it proceeds to question the sustainability of settlers' improved living standards and the paradoxical second generation problem as to their future opportunities in the frontier settlements. Using the world exchange system as an interpretive framework, the failure of rural urbanisation strategy is illustrated. The planner's limited role in influencing the results of the resource frontier strategy is also examined.

Chapter 8 discusses three alternatives to resource frontier strategy in a full spectrum of options: agropolitan strategy (closed economy), integrated regional development strategy and industrialisation (open economy). Attention is focused on each alternative's capacity in retaining the second generation youth in Pahang Tenggara and Kesedar. Consideration is, however, given to both technical and political compatibility to the Malaysian reality. Finally, a people-oriented industrialisation is advanced so as to meet the employment demand of the fast growing population in the next twenty years compatible to Malaysia's current political, economic and social structure. Such impact on regional development and the frontier areas calls for future research.
PART I

RESOURCE FRONTIER STRATEGIES IN FOCUS
CHAPTER 1

ORIGINS OF RESOURCE FRONTIER STRATEGIES

Theories are often shaped by historical events. How they evolve is determined by societies' needs and efforts to adapt them. This certainly holds true for theories of development. This thesis focuses on one aspect of development theory - resource frontier strategies. It demonstrates how theories have evolved, been applied and modified, and how they can be reassessed in the light of the Malaysian experience.

An investigation of the resource frontier as part of national development strategy raises key issues: where and how have the ideas on resource frontier development originated? As the resource frontier strategy has stemmed from urban-industrial growth theory of the developed nations, we also need to ask: how has the theory evolved to give birth to resource frontier strategies in rural areas of the developing world?

In tackling these two issues, we focus on the international arena after the Second World War where a complex political situation called for centrally-planned growth-oriented theories (Section 1). In discussing these neo-classical concepts, we refer to ideas of modernisation and the spatial diffusion of growth - two recipes adopted by developing nations for 'westernising' their societies (Section 2). Simultaneously, the rudiments of regional development theories also emerged in response to the need to link economic growth with geographical space. Consequently, the works of Perroux, Myrdal, Hirschman and Boudeville are discussed, outlining the positive and negative effects of growth in space. Then, an empirical application of these theories in France is discussed (Section 3). Finally, attention is focused on how and why an originally urban-industrial theory has been extended to the rural environment of developing countries (Section 4).

As the argument is complex, its structure is outlined in Figure 1.1.
1. DEMAND FOR GROWTH-ORIENTED DEVELOPMENT

Before the outbreak of the Second World War, the fruits of capitalist development were mainly restricted to core nations in Western Europe, North America and Japan. Generally, ordinary citizens in these areas, if not all classes in society, were able to improve their standards of living, as a result of the rise in productive capacity of workers (accompanied by their social movements), and technical innovations in agriculture, industry and commercial undertakings. In contrast, the colonised or other underdeveloped parts of the world were 'peripheralised' as mainly producers of primary products subordinated to the core capitalist countries. After 1945, this general image took a sharp turn with the emergence of a new balance of power. This section examines briefly how this new international situation forced the core capitalist nations to expand the
technological fruits of modernisation, once considered their monopoly, to the underdeveloped world. As witnessed later, the introduction of modern development theories to the underdeveloped world has assisted the latter to adopt a series of Western standards of material demands and activities. Consequently, such introduction has also served to expand the market interests of the core nations.

The International Political Scene During the Immediate Post-War Period

The year 1945 saw the end of a disastrous global conflict. Subsequently, two important consequences shaped the post-war era. First, the world was divided into two main antagonistic political blocs: the East and the West. Second, the 'awakening effects' of the war created new nations, and released one after the other from the former colonial powers. Immediately after the war, the old colonial powers in Western Europe were preoccupied with their reconstruction tasks. The United States of America, however, emerged from the war strengthened and assumed a greater international role. A new non-territorial hegemony began to take shape.

Under the United Nations, there was an urgent task 'to help repair the ravages of war, to promote the development of underdeveloped countries, and to stimulate production, investment and trade ... to foster conditions of full employment and steadily rising standards of living' (Asher, 1957:371). While Western Europe and Japan recovered steadily, the economic progress in underdeveloped nations was insignificant. This latter aroused great concern in the Western bloc which was worried about the expansion of Soviet influence. It was, therefore, the vital interest of the United States to take action in underdeveloped 'areas now stirring with social unrest and resentment of their impoverished material state ... [She] cannot stand idly by and witness the recruitment of the populous countries of Asia and perhaps even of Africa and Latin America to Communism' (Buchanan and Ellis, 1955:429). Thus, providing aid to boost economic development in the underdeveloped world to alleviate conditions of poverty and unemployment was seen as a priority for development (Hayes, 1971:3-5).
Clearly, an orderly progress to social and political stability cannot be assured without a reasonable rate of economic growth, and a systematic economic management for growth became a prerequisite. In response to this imperative, a report released by the United Nations (1951:13-15) pinpointed a few preconditions which were strongly related to the market value of production (Friedmann and Weaver, 1979:109). They included: (a) the desire for material progress and social prestige; (b) the will to overcome nature and to adopt modern technology and educational systems; (c) the respect for private property by the national government which should also improve its legal stipulations; and (d) a more individualistic outlook to discourage large family ties that tend to obstruct individual achievements. Self-interest was seen as an important criterion of economic success and was to be assumed by the 'creative entrepreneurs'. Further, the report continued optimistically to suggest that 'given leadership and the public will to advance, all problems of economic development are soluble' (United Nations, 1951:16). Basically, the report hoped that the widespread problem of persistent unemployment and underemployment could be relieved through the transformation of subsistence agriculture, then predominant in the Third World. Two of the five experts appointed to prepare the report were Arthur Lewis and Theodore Schultz. Their thinking had a great impact on the development of neo-classical economic growth models.

Economic Growth Theory

Modern theories of economic development took root in the climate of post-war reconstruction where concepts of 'development' were mainly taken as being identical to economic growth. Some leading contemporary economists argued that economic growth would also lead to universal equilibrium when lagging nations caught up with the more advanced nations. According to Paul Samuelson (1947) and Theodore Schultz (1950), the redistribution of resources between nations could best be achieved by the free flow of factors of production and goods and services between them (that is, the market mechanism underlying neo-classical economic theory). Neo-classical economists believed in free trade and argued that exports historically had generated a considerable
amount of economic growth. By integrating the free flow of factors of production and exportable commodities into the sphere of free trade, they asserted that developing nations could shorten the process of 'catching up'. By extending David Ricardo's original idea on the theory of comparative cost advantage, it followed that a country should specialise in the production and exports of commodities which they could produce cheaply (Buchanan and Ellis, 1955; Clark, 1951; Rostow, 1953). Free trade, the theory continued:

'would raise the participatory country's level of welfare [and] lead to a factor price equalization between the countries. Wage differences between the developed and the less developed, for example, would be released, which, in turn, would lead to a more equal international distribution of income, ... trade would transfer both technical and administrative know-how to countries that needed it ... [and an] indirect advantage from trade was that it promoted free competition. Increased competition was to raise efficiency and lead to faster growth' (Blomstrom and Hettne, 1984:15-16).

Thus, in a simplistic way, the theory placed developed and underdeveloped countries on an equal footing in a competitive world market system.

According to Nurkse (1953), free trade also enhanced the real demand for goods produced in poorer countries because of their limited domestic market size. The expansion of market size, he went on, would encourage investment in capital goods which, in turn, would increase the productivity of the labour force and, consequently, the latter's real income. To acquire initial capital, Nurkse recommended that foreign capital was necessary to break the 'vicious cycle' of poverty before any substantial domestic savings could be attained. Thus, this requirement 'is the redeeming force that has to be invoked to break the circle on the supply side of capital formation in low-income countries' (1953:57). Once this take-off was underway, many economists believed that domestic savings could establish a strong base for capital formation – the most spectacular presentation was indicated in the Harrod-Domar model\(^1\) of the 1950s. Based

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1 The model studies the relationship of savings, investment and income. From this relationship, the long term economic growth of a national economy is projected. The basic equation of the model is to
on Keynes's model of national income determination, this model has had widespread influence in the economic policy formulations of developing nations, particularly in projecting the rate of aggregate growth highlighted by Rostow (1960).

Alongside the emphasis on free trade, capital formation and breaking of cultural impediments, Rostow proceeded to the heart of the development issues: how long would a developing nation take to achieve and sustain take-off? This was the most pressing question being considered by the anxious leaders of the developing and often newly-independent countries as a 'long' take-off would imply a 'bad' model for them to follow. In elaborating his theory, Rostow (1960) suggested a generation (or fifteen years) for take-off provided that the 'inner determinants of growth' were present. These determinants were based on:

(a) The rate of productive investment rising from about five per cent of national income to over ten per cent;
(b) One or more substantial manufacturing sectors emerging to become 'leading sectors' in growth; and
(c) The political, social and institutional framework of the country being modified to exploit the impulses in the modern sector and the potential external economy, and thus giving growth an ongoing character (Rostow, 1960:164).

The role of manufacturing and the external economy, as Rostow pointed out, has had strong urban-industrial implications. Industry was given a critical role. Further, the neo-classical school was attracted especially to the principle of profit maximisation. Developing countries were urged to make minimum use of investment funds for highest profit levels in the light of their limited national income, export demand, labour supply and available foreign exchange (Chenery, 1955:452). Income inequality was given little consideration because 'if only growth could be sustained, distribution measures might be

determine the growth rate (G), in relation to the propensity to save (S) and the capital-output ratio (V) in the form as $G = S/V$. 

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rendered all superfluous. Growth could become a substitute for distribution' (Friedmann and Weaver, 1979:89). Arthur Lewis (1955:428) argued that the generation of this economic growth might even have to depend on inequality of income because 'reasonable' differentials in the forms of salaries and profits were objectively necessary to serve the required skills or initiatives. Clearly, growth itself cannot be motivated in good order without a regulatory agent. This role is assumed by the state as recommended initially by Keynes in the 1930s.

The Keynesian Approach

Reflecting his macro-economic orientation, Keynes's greatest impact has been his strong emphasis on government intervention in handling social crises provoked by an economic depression. For Keynes, the level of saving and investment had to be increased through stimulation in demand and growth by the government. Economic growth was best achieved by providing public overhead capital in social and physical infrastructure to facilitate private productive activities.

The importance of these economic growth concepts, for the evolution of regional development theory was that: (a) they explicitly recognised inequalities in economic well-being (although among nations not regions) and; (b) they prescribed a series of policies, or 'development paths', which underdeveloped nations could follow. With economic growth theory so heavily focused on capital formation, investment and urban-industrial growth, early regional development theory, not surprisingly, stressed the economics of industrial location and comparative cost advantage. Also, indigenous political elites were emerging in newly independent states; they were virtually all committed to some sort of national development. Consequently, the Keynesian interventionist approach was combined with growth theory by many developing country governments to sponsor land development projects in order to increase aggregate demand and thereby, raise the level of economic activity and reduce unemployment. The expansion of manufacturing was seen as the most potent force in regional economic growth. Before examining how the growth-oriented theories were translated into state-sponsored regional development
programs, we need to look closely at the 'catalytic agents' – modernisation theory and the spatial diffusion of growth.

2. MODERNISATION THEORY AND SPATIAL DIFFUSION OF GROWTH

Paralleling the close linkage between neo-classical growth theory and regional development theory, was the influence of modernisation theory on geographical studies of developing countries. This 'geography of modernisation' approach placed a sharper emphasis on the space economy of Third World countries.

Modernisation Theory

Since the Second World War, modernisation theory has been seen as a form of social transformation into a new way of life – the end product being characterised by urban-industrial advancement. Tradition and modernity are regarded as two opposing forces (Brookfield, 1975; Forbes, 1984; Griffin, 1969; Myint, 1954; Rimmer and Forbes, 1982). Underpinned by the Western experience of capital formation and a purely economic-based theory of growth, the modernisation paradigm has become a multidisciplinary complex theory of temporal development. In this theory, development is seen as an evolutionary process in which less developed countries would gradually 'catch up' with the industrialised world, by means of an imitative process. Modernisation, however, is a protracted process where old values are replaced by the new. The task of modernisation is to replace ‘backwardness’ and subsistence with new demand and consumption patterns. To make the imitation process successful, it was believed that developing countries had to take strong initiatives to discard their 'backwardness'. Internal factors – conservatism, poor infrastructure, old social and cultural institutions and values – were seen as the main causes of a lack of development.

Economic 'backwardness' of a society has been interpreted by Myint (1954:150) as a lack of response of its members to monetary incentives. Once this barrier is broken, 'traditional' societies subject to influence from the 'modern' world will undergo a set of
changes towards becoming an industrial-society in their own right. It follows that underdeveloped nations having engaged themselves in such changes are presumed to have the capacity to disengage from their 'backward' and 'traditional' features, considered to be 'barriers' to modern economic development. Through modernisation theory, therefore, 'progress' towards a more advanced society was supposed to be transmitted to the developing world not only over time but through space.

**Spatial Diffusion of Modernisation**

Based on the stages of growth, modernisation is thought to involve a spatial process of diffusion, activated by expansionary forces through an urban hierarchy and a system of communications. Accordingly, main cities are placed on the top of the hierarchy and play a fundamental role in inducing the underdeveloped world to accept economic growth (Hoselitz, 1953). They can break the obstacles of 'traditionalism of the social values'. Cities, Hoselitz (1953:197) further suggested, 'are the main force and the chief locus for the introduction of new ideas and new ways of doing things'. Moreover, the role of the communication system was reflected in the study of 'modernisation surfaces' which flowed through corridors – linear geographic paths linking industrial centres (Pottier, 1963 in Richardson, 1973).

Having discussed how growth impulses are spread, another conundrum was the incompatibility between a 'modern' urban sector and the 'traditional' rural sector. As an economic growth theorist, Arthur Lewis (1954) developed a dualistic model which bridged the gap between traditional and modern sectors when he studied this relationship. He highlighted how urban-industrial activities could modernise the traditional sector by a diffusion mechanism. Several assumptions were made by Lewis in projecting such a process. The main ones were stated as: (a) agricultural production was a stagnant one and at a subsistence level; (b) there was 'surplus' labour and 'disguised' unemployment; and under these conditions, (c) capital accumulation would not occur. Once 'surplus' labour is transferred to the urban sector, the traditional sector would be 'forced' to change because of labour scarcity. Following urban-industrial expansion, which required an
increased labour force, the price of food—would be raised. This would create price incentives in the agricultural sector and encourage the improvement of farming methods. Food products would be commercialised in an efficient manner to meet urban demand. As a result of these benefits from the urban area, the capitalisation of the rural sector would be achieved and the national average wage level would be enhanced when 'surplus' labour was finally exhausted. At this stage, the national aggregate economy would also be raised to a higher level.

Drawing upon modernisation theory and Lewis's dualistic model, many geographers began to study the spatial diffusion of growth impulses. In their formulations, the city was seen as the main agent of change. From the city centre, growth impulses were diffused outwards, with its intensity declining proportionally as one moved further away from the core. In the early 1960s, Peter Gould (see Brookfield, 1975:111) first used the term 'modernisation surface' to describe the evolution of the urban and transport system in Ghana. Following Gould, Soja (in Kenya 1968), Riddell (in Sierra Leone 1970), and Leinbach (in Malaysia 1972), conducted similar studies. All of these studies highlighted that the urban centres developed during the colonial period acted as 'islands of modernity' and centres of diffusion of modernisation. In particular, Riddell (1970:45; 47-48) has noted that:

'Modernization is a spatial-diffusion process ... Its origins are localized to specific regions or zones, indexing a contact situation, and the patterns of change move like waves across the map, and cascade down the urban hierarchy as they are funnelled along the transportation system ... While the growth of the transportation system is part of the modernization process, it is also much more. The spreading network of rail and roads continually redefines the spatial fabric of the country'.

Thus, the influence of diffusion of modernisation was clear.

Regional development planning in the Third World during the 1960s and early 1970s was influenced by these theories of growth and modernisation. Consequently, it relied heavily on the urban-industrial approach to project regional planning objectives. Transport and communication networks connecting regional or rural hinterlands with the
primate city were stressed. Gradually, traditional factors in the rural sector have given way to modern, usually foreign-imposed factors. Modernisation theory and diffusion theories, however, have not been precise about 'where' this diffusion should take place and 'how' the linkages occur in the process, although cities are broadly mentioned as centres from which impulses diffuse. The geography of modernisation was basically a description of concept rather than a theory of process. To provide an explanation of process and to formulate measures to promote the spread of economic growth over space, we turn back to earlier theories of location and regional growth.

3. SPACE-RELATED REGIONAL GROWTH THEORIES

Before 1945, there was relatively little academic or government interest in regional development in the colonial world. Most of the efforts of economists, in particular, had been concentrated on international issues, such as trade and imperialism, or national problems, like unemployment and slow economic growth. In the United States, the Tennessee Valley Authority, commenced in 1933 as part of Roosevelt's 'New Deal', served as the first comprehensive river basin planning authority. Initially, the Authority's involvement included flood control, navigation, dam construction for electric power, revitalisation of fertiliser plants and reforestation. Later, it started new town construction and promoted urban-industrial development when ample power supplies became available. Though its administrative network was taken up later as a model, its concept of development per se had not been underpinned by theories indicating how growth occurred over space. The focus of modern regional development theories was equally centred on spatial problems of Western nations. As even within more advanced nations, modernisation was not evenly spread, there were pockets of 'backward' agricultural and mining regions. Hence, this section examines how the need to develop backward locations led to Perroux's (1950) non-spatial concept being transformed into modern regional growth theory focused on the city and its hinterland.
Perroux and Growth Pole Theory

A strong interest in uneven development resulted in the emergence of François Perroux as one of the leading post-war authors on economic growth. In 1950, he defined 'economic space' as an 'abstract space' in which human beings and objects as materials find themselves contained. Within this abstract space, there is a field of forces consisting of centres (or poles or foci) 'from which centrifugal forces emanate and to which centripetal forces are attracted. Each centre, being a pole of attraction and repulsion, has its proper field which is set in the fields of other centres' (Perroux, 1950:27). These 'centres of forces' were later developed into the 'propulsive forces' (forces motrices) of key industries or firms which have multiple linkage effects. As Perroux noted, the linkages were geographically dispersed, depending on the prices and costs of inputs and outputs of the key industries. As the factors affecting the prices and costs were not controllable by the economic plan of the industries, they, as he believed, were capable of expanding and declining over time. When expanding, however, it enhanced the national growth as a whole.

Subsequently, Perroux's non-spatial concept of economic forces evolved closer to reality. In 1955, he argued that a growing 'propulsive unit' tended to be geographically concentrated and its activities intensified. This concentration necessarily brought external economies and high division of labour into a network of 'collective needs' (Perroux, 1955:185). The propulsive industry or groups of industries were characterised by their modernity in three specific ways:

(a) Strong concentration of capital under one single management;
(b) Technical division of labour and mechanisation; and
(c) A higher rate of growth in production as compared to the average national rate of industrial growth, during a specified time period (Perroux, 1964:180).²

Such capital-intensive and technically sophisticated plants, according to Perroux, would generate effects of regional disparity. As outlined by Perroux (1955:185), an industrial plant which was:

'geographically concentrated, modifies its immediate geographical environment, and if it is powerful, the entire structure of the national economy in which it is situated. Being a centre of accumulation and concentration of human and capital resources itself, it gives birth to other centres of accumulation and concentration of resources'.

This statement of Perroux raised, for the first time, the direct relationship between a dominant core and its hinterland.

Indeed, Perroux's spatial linkage concept has had two separate influences on economic growth studies. Firstly, the interrelationship between the geographically concentrated industry and the immediate environment has had strong policy implications in the implementation of future regional projects. (This relationship was later interpreted as a city or growth centre and its hinterland). Secondly, based on his idea that centres were induced by an initial strong centre, Friedmann (1966) used the centre/periphery relationship to develop the concept of interdependent core regions. Before examining Friedmann's works of the 1960s, however, we proceed to discuss Gunnar Myrdal and Albert Hirschman whose ideas have amplified Perroux's ideas in an underdeveloped context.

Gunnar Myrdal and Albert Hirschman

By borrowing Perroux's (1964:187) abstract notion of 'entraînement de croissance' (literally growth induction) and interpreting it as 'spread effects'; Myrdal (1957) went a step further by also clarifying the negative effects of growth – the

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'backwash effects'. Myrdal's focus of study, however, was on the flow of capital, labour and resources in relation to the free play of market forces. Market forces, he argued, increase the inequalities between regions and, therefore, widen disparities in regional per capita income. Because of agglomeration advantages enjoyed by a prosperous region, market forces increase the economic return for activities in certain geographical areas and this leads to further expansion. Conversely, a lagging region suffers from loss of labour, capital, goods and services to a prosperous region. A prosperous region has two kinds of effects on a lagging region: spread effects and backwash effects. A lagging region, according to Myrdal, always receives fewer spread effects and more backwash effects. Such effects of cumulative causation, as he called it, give rise to polarisation.

Polarisation, as seen by Myrdal, was more of a global concept, differentiating between a coexisting developed and underdeveloped world. In the developed world, skilled labour and investment capital was abundant and the technological innovations advanced rapidly. In the underdeveloped world, capital formation and investment capital were relatively small. Little progress had been made. The overall economic inequalities as observed between these two worlds had been increasing (Myrdal, 1957:4-6). Free trade was to the disadvantage of poor regions whose industrialisation efforts were also being distorted. Myrdal, however, did not believe in stable equilibrium between spread effects and backwash effects. Any centre of development might either experience cumulative forces to expand upwards or lose control and decline downwards. He thought the capitalist tendency of increasing inequality might be checked by government intervention.

Myrdal's work was paralleled a year later by Hirschman (1958). The latter believed growth was necessarily unbalanced and he supported the concept of growth poles which would promote development through a 'chain of disequilibria'. Profit realisation was promoted by this 'chain' through industrial capital, inducing consequently new investment in other industries and their expansion (Hirschman, 1958:66). He classified the developing region and the lagging region as 'north' and 'south' respectively. The
terms of trade were set against the 'south' where income elasticity of demand was low. The expanding 'north' would receive skilled labour and capital from the 'south'. The 'south', however, benefited by the purchases from the 'north', and by the increase in its marginal productivity of labour through out-migration of its 'surplus' labour. This brought about an increase in per capita consumption levels of the 'south'. Hirschman's main idea on the capacity of the growth pole hinged on the fact that cumulative concentration of growth in a pole with agglomeration advantages would initially increase regional economic disparities. In the long run, however, the agglomeration diseconomies and the spatial trickling-down effects generated from the pole itself would reduce the disparities. Like Myrdal, if the reduction of regional disparities took too long to realise, he saw that the state would counteract the polarising market forces by using its 'equilibrating mechanism' – a combination of neo-classical and Keynesian approaches.

State intervention to redistribute investment resources was a strong component of Hirschman's unbalanced growth strategy by which he hoped to achieve a 'forced' inter-regional transmission of growth. Basically, Hirschman's strategy implied that an urban-industrial growth pole would be the best way to achieve national growth, applicable at regional and rural levels, although no mention had been made how that would actually occur. This became clearer in the early 1960s when Perroux's assumption was put to test by Boudeville in both developed and developing countries.

Boudeville – Applying the Growth Pole Concept in the Centre

Boudeville (1965; 1966) confirmed the Perrouxian concept of economic space by providing it with a spatial linkage at a regional level. He gave Perroux's abstract 'economic space' a more concrete meaning as having common economic structure and characteristics represented by economic variables at macro-economic level (Boudeville, 1966:2-11). For practical planning purposes, Boudeville turned this 'economic space' into a 'continuous and localised' region, a region which could be systematically programmed or planned. Consequently, the growth pole with one or more key firms was converted to an urban growth centre surrounded by its regional hinterland. If the centre's
industry was propulsive and the growth induced was contained within its hinterland, growth effects would be felt within the whole region concerned (Gore, 1984:94). Like Hirschman (1958) who criticised balanced growth, Boudeville argued that all growth was necessarily polarized. In his 'operational planning model' used for French regional planning (aménagement du territoire) in the early 1960s, Boudeville presented strategies indicating the ways growth might be promoted in the twenty-six 'critical zones'. The government's role, as he recommended, would be to carry out policies assuring the 'greatest possible efficiency of the development of growth poles through the mechanism of their propulsive industries' (1966:112). We now examine briefly how this growth pole concept was applied in an advanced nation – France.

Growth Poles and Decentralisation in France

In the developed world, the concept of growth pole was incorporated into a decentralisation policy of France in the early 1960s. Earlier in 1955, in order to relieve a highly centralised industry and bureaucracy in the Paris Region, a series of decrees had been passed to encourage the location and expansion of industrial and commercial enterprises outside the region (Hansen, 1968: Chapter 3). There had been, however, little positive result as most new and extended enterprises were found later to be less than 15 kilometres away from the centre. A mere industrial peripheralisation, indeed, had been observed.

By the early 1960s, the growth pole concept was again incorporated into France's Fourth Plan (1962-65) to promote decentralisation and to counterbalance the dominant effects of the Paris Region. Considering that the polarisation at the Paris Region was bringing more harm than good, the whole concept adopted a conventional approach by classifying cities in an hierarchical order, in accordance with their size, functions and relationship to the transport network. Consequently, outside the Paris Region, the rest of France was subdivided into eight potential growth poles (métropoles régionales), selected on the basis of their 'zone of influence' and on the assumption that their wide range of activities were able to compete with Paris. To facilitate their growth in that direction, the
poles were 'given priority in the provision-of equipment characteristic of the superior level (culture, research, higher education, hospital equipment, administration, transport, etc)' (Hansen, 1968:235). The favour accorded to these poles faced, however, some opposition. The counter argument suggested that, in future, these poles might drain their surrounding regions and become overcongested themselves. Further, as pointed out elsewhere, the post-war urban dynamism rested with small cities which had experienced the greatest growth in France. It was, therefore, more justifiable in terms of opportunity costs to help develop small cities rather than selected poles. Sharp differences in view between top politicians and a lack of a general consensus gradually led to the loss of favour of the growth pole concept in France. When Georges Pompidou succeeded Charles de Gaulle as president of France in 1968, the concept, though remaining part of the national development agenda, was no longer raised as a guiding principle. The French experience has provided an understanding that development concepts have to be examined very closely against the socio-economic profile of the host country. Often, their application and continued use at official levels can be highly politicised and, sometimes very dependent upon the outcome of great debates. With this background, we now discuss the transplanting of an urban-industrial growth concept from the more advanced world to the rural Third World where national growth has been a principal objective.

4. FROM URBAN-INDUSTRIAL TO RURAL AGRICULTURAL GROWTH

By mid-1960s, the idea of spatial growth had reached a crucial stage. Modernisation theory was widely believed by both aid-donors and aid receiving developing countries as being able to transmit growth impulses. They could be transmitted: (a) vertically from advanced nations to the underdeveloped nations through social, political and institutional adaptations; and (b) horizontally over geographical space (Figure 1.2).
The neo-classical regional theories, however, further evolved in a different form to suit conditions in the Third World because regional development and its related growth must be regarded as the results of an adaptive investment process (Friedmann, 1966:61). Drawing upon the theoretical framework of Hirschman’s 'north' and 'south' and using the idea from Perloff and Wingo’s (1961), Friedmann (1966) came up with a 'core' and 'periphery' concept and applied it in South America.
Interdependent Core Regions – John Friedmann and Rural Frontiers

Like other neo-classical theorists in the early 1960s, John Friedmann (1966; 1969) initially had the same conviction that unevenly developed regions would ultimately converge towards equilibrium after several stages of development. Core regions, he argued, would generate and transmit growth impulses to other parts of the space economy. Although, as stated by Myrdal and Hirschman, a centre-periphery structure would drain the hinterlands of their resources, manpower and capital, Friedmann presumed that interregional imbalance was essential for a 'take off'. Only after a nation had acquired successful industrial development could a system of interdependent core regions be established through active state intervention. When a final network of interdependent core regions was achieved, commodity flows and factor markets would be efficiently executed (Friedmann, 1966:54). When full integration of the space economy was achieved in the form of a set of interdependent urban core regions over the whole national territory, there would be a 'spatial equilibrium' (see Figure 1.3). Within each urban core region, however, the dominating role of the urban core over its hinterland was maintained. On this point, Friedmann (1966:51) asserted that there was 'a complete spatial system ... integrated through a pattern of authority-dependency relations that is focused on the dominant core region'. The status of dependency was imposed by established institutions in the core over those in the periphery. Conceived on a purely economic footing, this view of Friedmann corresponds closely to the Perrouxian growth pole concept characterised by the effects of dominance.

Figure 1.3
A Functionally Interdependent System of Cities

Source: Friedmann, 1966
Friedmann's 'spatial equilibrium' of interdependent urban core regions, therefore, fitted closely into a comprehensive theoretical framework. This concept was incorporated into development programs undertaken by international aid agencies in which Friedmann played a very important role. Indeed, Friedmann was the first to test his idea in Venezuela, a developing nation expected to move towards the 'take off' stage of a Rostovian development path. But why has an urban-industrial theoretical framework suddenly been shifted to fit a rural frontier situation? Further, how has rural development been related to extant growth theory? These questions lead us to a discussion of the productive capacity of agriculture and the export-based theory also examined by neoclassical economists.

Agriculture and the National Growth

The eighteenth century French physiocrats stressed the pre-eminent position of agriculture in generating national income, but their view was challenged by Adam Smith who recognised the greater role of manufacturing in creating wealth. Over the next one hundred and fifty years, manufacturing became the key sector of industry and the mainstay of Western Europe. Heavily influenced by this tradition, Rostow, as noted earlier, conceived manufacturing as one of his three conditions for 'take-off'. Manufacturing, he suggested, should be the leading sector ahead of agriculture. In fact, his view was shared by Boserup (1963:205) who argued that agriculture had 'a low supply elasticity which tends to act as a brake on economic growth' and, as an immobile sector, agriculture's development was dominated by outside sectors. Boserup, however, recognised the importance of the modern plantation economy which, she believed, had no problem of inelasticity of supply. Modern plantation agriculture, indeed, was an inseparable part of Western industry. It could, therefore, transform itself as a leading sector of an economy. Schultz's view of agriculture was even more positive in that the marginal efficiency of capital was higher in agriculture than in industry (Jones, 1952:444). Although Schultz's (1953) reference to agriculture was basically the
American model characterised by large-scale farming and mechanisation, the plantation economy in many developing countries resembled it in terms of the economies of scale. Thus, as suggested by Lewis's dualistic model, subsistence peasant agriculture is reduced to negligible scale and there is a good chance of rapid growth by relying on modern agriculture. This, according to Lefeber (1958), would bring about 'interregional equilibrium'.

Yet, more importantly, developing countries had almost no solid industrial base in the 1950s in view of their colonial heritage. Their economies had concentrated on exporting commodities and minerals. Thus, a take-off along Rostow's lines within a relatively short interval was inconceivable if one had to start with manufacturing. Despite measures of import-substitution undertaken as the initial step towards industrialisation, the impact of manufacturing on aggregate national growth was negligible because the proportion of manufacturing was relatively small in the national economy. Consequently, the high proportion of agriculture in developing countries could most effectively bolster aggregate growth (Lewis, 1966:154-155). The role of agriculture to accelerate national growth is further supported by the export-based theory.

**Export-Based Theory**

This theory dates back again to the classical economy of free trade in the eighteenth century. Indeed, agricultural produce has been for a long time the largest earner of foreign exchange of developing nations. During the 1950s, an important case study was undertaken by Douglas North (1955) on the Pacific Northwest Region in the United States of America. This study indicated that the whole development of a region could be dependent on its exportable commodities and that the export base determines the region's level of absolute and per capita income. His findings also showed that a region need not industrialise and may expand so long as there is increased demand for its existing...
exportable commodities. The essential factors are the competitive position of the region (including cost and technological advantages), the adaptive capacity to external demand and taste, as well as growth in income and demand in the importing neighbouring regions. For this to work, North admitted that this system was framed and developed within the capitalist institutions responding to profit maximising opportunities to the extent that the export base was profitable and a part of the profit was reinvested for the expansion of the base (North, 1955:240 and 252). By means of trade in primary resources, Pfister (1963) further suggested that a region may achieve high per capita income, yet remain unindustrialised.

Another identical study carried out by Perloff and Wingo (1961) showed how 'typical' resource regions of the United States grew over a period of seventy years. They suggested that early agricultural resource regions could grow towards an advanced industry and service-oriented economy. At the initial stage, the relative economic growth of a region had to rely on its relative competitive advantages in labour quality, costs and efficient transport linkages with the exterior. With these advantages, a resource region would produce goods and services accessible to the national or international market. This, in turn, helped the region expand in other industrial and service activities. However limited the practical use of the export-based theory to the Third World, it still has great appeal to many developing countries because they have retained their inherited comparative cost advantages from colonial days. Thus, a faster growth rate may be achieved by developing the existing largely agriculture-based economic infrastructure.

Applying the Growth Pole Concept in the Periphery

A series of positive empirical results had also encouraged political leaders of developing nations to accept growth centre theory. The most encouraging one was the development of the Tennessee Valley. The experiment indicated that by first developing a

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3 According to North, the employment aggregate in secondary and tertiary sectors may exceed that of the primary sector. The region, however, remains agriculture-based if the growth of the first two sectors depends on the latter sector.
region's resources, a depressed agricultural region could be transformed into a manufacturing region. This successful case provided a model for developing nations. By the mid-1950s, twenty years after its implementation, the value-added in Tennessee Valley industries had increased substantially. The most spectacular force of attraction stemmed from cheap electric power generated by a dam in the valley which served not only industrial entrepreneurs but ordinary households. A large number of people had been attracted to this planned region (Friedmann and Weaver, 1979:78-79). Also, the empirical work of Nicholls (1961), Berry (1961) and Merà (1965), for example, demonstrated the positive effects of urban centres acting as growth centres in promoting agricultural development. By the early 1960s, with the assistance of the international aid agencies (particularly the Ford Foundation), growth pole theory was extended to encompass rural agricultural projects in developing nations.

In May 1965, the application was further institutionalised by a resolution adopted by the Economic and Social Council of the United Nations. The objective was to promote regional development on a world-wide scale, mainly in response to serious problems of rural exodus to primate cities and in recognising:

'the common aspiration of developing countries to modernise their economies through industrialization and agricultural improvement programmes as a basis for raising levels of living of their population, and recognizing that regional development and an appropriate distribution of population within a country are essential factors in achieving such modernization and social development; ... [All] these problems can be greatly enhanced by study in depth of the practical experience of existing regional development projects within countries, and the training of manpower in the new methods and techniques resulting from such research' (United Nations, 1966:v).

This United Nations document produced a combination of three essential elements: agriculture, regional development and modernisation. It was also a combination of ends (modernisation) and means (regional development) suited to conditions of developing countries. Clearly, agriculture served as the economic base.
Several members of the research group requested by the United Nations Secretariat to prepare the report were familiar with John Friedmann's contemporary ideas. They were Harvey Perloff, Lowdon Wingo, Edgar Dunn and Joseph Fisher. The report suggested five developmental regions (United Nations, 1966), as did Friedmann (1966), and both selected a 'frontier region' as an important area for development. The former defined it as 'a virgin or low-density territory, most frequently associated with large-scale natural resources development ... characterized not only by intensive resource development, but also by industrialization and building of a new town or a series of new towns' (United Nations, 1966:4). The emphasis closely resembled that of Friedmann (1966:42) who saw that resource frontier regions:

- are zones of new settlement in which virgin territory is occupied and made productive ... New colonization will be predominantly agricultural ... associated with large-scale investments in a mineral or forest development scheme and involves substantial urbanization ... They are inevitably based upon a city as the agent for transforming the wilderness into an environment suitable for long term habitation'.

Notably, cities were believed by both as having potential as 'growth poles' or 'growth centres' in bringing frontier regions into zones of high productivity.

The role of agriculture was acknowledged. To ensure easier handling of regional programs, the model of Tennessee Valley Authority became a prototype. Like an implementation plan set up by the Marshall Plan in Western Europe, plans for regional programs were to ascertain that they 'encompass proposals for resources and their utilisation, as a basis for government policy and action' (Waterston, 1965:34). Thus, an initially urban-industrial growth theory found its way from North America to the Third World. The action of the United States was a reflection of pragmatism (that is, experiments with a new concept have to be tested somewhere to determine its practical value). This could be brought about by project implementation. Conversely, the positive reaction of developing countries arose from their need for an instrument to fit into their socio-economic framework of development — within an economic base which can be either urban-industrial or rural-agricultural. Moreover, to the less developed nations and
particularly those newly emerging nations-adopting capitalist systems of production, development plans served also a vital purpose of nation-building and a justifiable public enterprise. As noted by Robertson (1984:35), the plans were:

'both a credential and manipulative device, but it was also a means by which each regime could express to its subject population its will, its identity and its active concern for progress. Without nationhood, without authoritative links between the mass of the people and the new and often fragile state structures, orderly progress was impossible'.

Thus, the plans were the new credo.

As to the consequence of regional disparity caused by large-scale development, the support for an 'eventual equilibrium' was not lacking. Both Massé (1964) and Williamson (1965), inter alia, argued that raising income inequalities between regions was typical of early development stages while regional convergence was a feature of more mature stages of national growth and development. Spatial and social inequality, then was seen (and tolerated) as an inevitable consequence of the 'development process'. Consequently, with multiple apparent gains, the 'green light' in the developing world was switched on for a plunge into the regional growth pole trap. When the source of growth was later modified from industry to agriculture, the term 'growth centre' was more frequently used.

Resume

This chapter has examined how an original urban-industrial growth theory was introduced from the developed world to the rural Third World to include resource frontiers as a regional planning unit. Though the focus of resource frontiers was centred on the city, the economic base shifted from industry to agriculture.

After 1945, the Western bloc was deeply concerned about Soviet expansion. Thus, there was a pressing need to help Western Europe and Japan recover from their ruined economies and lead the underdeveloped world towards a growth-led economy. In response to this, a series of neo-classical growth theories appeared as lighthouses and
navigational aids to guide the developing nations. They stressed the importance of international trade, capital formation by foreign investment and domestic savings, manufacturing and entrepreneurship to bolster national growth. The Keynesian approach was also a useful tool by which national governments might intervene to promote the overall growth by creating general demand. Moreover, modernisation and the growth diffusion theories suggested that once 'traditional' values are abandoned in the underdeveloped world, 'progress' from advanced nations could be transmitted over geographical space. The underdeveloped countries, as suggested, would be able to enjoy democracy and affluence.

But there was a basic requirement for a location to start the process of imitation. Thus, urban-industrial centres were selected because they were nodal points possessing many advantages as centres of innovations, skills and capital and external economies. It was also believed that cities were where the growth stemming from the industrial pole spreads outwards. Consequently, the linkage effects of the growth pole were examined. Most early regional growth theorists were satisfied that spread effects would prevail and that polarisation effects emerging in the initial stage would disappear in the long run. Further, any government could intervene to counteract such negative effects.

Yet, there was still another problem to resolve. Could regional growth pole theory be implemented in developing nations whose industrial base was weak? Indeed, the argument continued that the theory needed to be adapted to the situation of the host country. Only through experimentation could the result and theory be tested. Frontier regions that were resource-rich were good sites for such a test. These regions, moreover, could be transformed into zones producing mineral resources and commodities for an export market. Some influential authors have suggested that agriculture and an export market were able to bring fast growth because developing countries' primary sectors constituted the highest proportion of the gross domestic product. With cities and their contiguous agricultural hinterland, regional growth, it was argued, could be expected. In 1966, under the auspices of the United Nations, resource frontiers were institutionalised
as one of the five developmental regions in their action plan. Simultaneously, South America's resource frontiers became the first experimental areas, based on regional development programs assisted by international aid agencies from mainly North America. Thus, the South American experience is discussed before conditions on resource frontiers in Peninsular Malaysia are explored.
CHAPTER 2

APPLICATIONS OF RESOURCE FRONTIER STRATEGIES
IN SOUTH AMERICA – BRAZIL AND VENEZUELA

"The Ford Foundation [has] ... a conviction that mankind has the means to liberate itself progressively from poverty, disease, ignorance and devastating war and to reach higher levels of civilization. ... Many of the leaders and scholars ... stressed the Foundation's ability — and responsibility — to act imaginatively and experimentally, ... to realize its full potential to extend and apply knowledge so that change will be directed to the benefit of mankind. ... In one sense, its mission is to search for ideas and for imaginative men and women and enterprising institutions to carry them forward" (Ford Foundation, 1962:15).

Theories relating to uneven spatial development have evolved at an accelerated pace since 1945. They have attracted the attention of governments in Western nations ever since. Based on these theories, industry and mineral resources have been used to promote economic development in retarded or backward regions within developed nations. In the process, cities were considered as the key to economic advancement and the mechanism for transmitting growth impulses over geographical space. Conditions in the Third World, however, are very different from the industrial core countries. Consequently, policy adjustments have to be tailored to suit specific situations. South America became the first 'laboratory' for resource frontier and Third World regional development theories. In applying this new knowledge of spatial development since the early 1960s, there was active involvement from Western 'philanthropic' institutions such as the Ford Foundation (1962), which believed that less-developed parts of the world would benefit from its application. Matching this conviction, consultants from international aid agencies and their Western-trained local counterparts helped introduce and spread the growth pole or growth centre concept to the remote frontiers.

Indeed, through direct interventions of the 'MIT-Harvard Joint Centre for Urban Studies' in the early 1960s, Venezuela's Guayana region became the first development
package devised by John Friedmann and his-colleagues from North America. Friedmann also was employed as a senior consultant in Brazil and Chile. Although he was not directly involved in the Amazonian frontier program, his fashionable development ideas had clearly influenced Brazilian decision-makers to use the growth pole theory in their attempt to narrow the gaps between the more developed Centre-South coastal core region and the depressed Northeast. In the late 1960s and early 1970s, this development concept prompted a rural agricultural strategy for the vast Amazon Basin. The Brazilian model drastically downgraded the original criteria from an urban pole to a rural growth centre. This adaptation reduced the financial burden of the Brazilian government considerably. Therefore, it is important for us to examine this empirical experience before studying the Malaysian strategy. We then show how Malaysia adapted the development concept to meet local social, economic, political and physical conditions.

In examining how two different resource frontier strategies were applied in South America, we have to ask: why was the resource frontier concept applied in South America; and how did it relate to other development objectives? Having posed these basic questions, we look closer at the host country's more specific motives behind the application of resource frontier strategies by asking: what lessons were learned from this 'laboratory' test in South America for other Third World countries?

In response, we begin by exploring the origins of spatial polarisation in South America and reasons why constituent countries were so concerned about this phenomenon. Initially, the fundamental problems associated with the use of resource frontier strategies are identified (Section 1). As it is not possible to study all countries that have adopted resource frontier strategies in South America, Brazil and Venezuela have been selected for particular consideration because they showed a vigorous interest in growth-pole strategies during the 1960s and 1970s. The strategies employed in integrating the frontier regions into their spatial structures provide two contrasting case studies — rural-agricultural versus urban-industrial. Furthermore, these different approaches provide a useful background for a comparative study (Section 2). Finally, we
draw lessons from a brief comparative assessment of settlers' experience in Brazil's Amazon and Venezuela's Guayana resource frontiers before attention is focused on the settlement patterns (Section 3).

1. POLARISATION AND INTEGRATION IN SOUTH AMERICA

During the early 1960s, the growth centre strategy had been widely acknowledged in South America as a useful tool to guide regional growth. Many leading academics interested in this strategy had also undertaken research there - Perroux, Hirschman, Friedmann, Rodwin, Boudeville, Hilhorst and Paelinck. Influenced by regional science, Friedmann (see Friedmann and Stöhr, 1966) was convinced that resource frontiers could be used as an area for testing regional planning concepts preparatory to transforming it into an applied science. Before discussing how resource frontier strategies were operationalised, we examine briefly why South America sought a more balanced spatial development leading to the use of the growth centre concept in frontier regions. Three main issues were critical.

**Poorly Integrated National Territory**

Initially, South America's polarised structure stemmed from its historical growth process. From European colonisation to the end of the Second World War, South America was a continent marked by a series of dichotomies between capitalist and non-capitalist modes of production. The gap between these two modes was reflected in two distinct living spheres which, in turn, mirrored different levels of social injustice (Friedmann, 1959; Babarovic, 1978). This duality was observed in South America's two economies - an externally-oriented economy concentrated on the coastal core area and a largely subsistence economy in the interior. Following independence, urban concentrations accelerated in most South American countries during the nineteenth century. Between 1840 and 1910, there was a massive construction of over 100,000 kilometres of railway line within the coastal regions which marked the early phase of spatial concentration. Moreover, this was a period characterised by the expansion of
peripheral capitalism in South America's commercial agriculture and small-scale manufacturing. The latter attracted much investment to its major urban centres where infrastructure was being upgraded. But these centres were basically enclaves linked closely to foreign metropolitan centres having little effects on the internal economy (Hennessy, 1978:26; see also Slater, 1975; Gilbert and Gugler, 1982 for a detailed description on the formation of spatial inequality). Thus, there was an early emergence of core and periphery.

After 1930, the core-periphery phenomenon was intensified by the adoption of import-substitution policies as South American governments sought to boost their economic bases. Consequently, almost all industries were located in or near the traditional export centres to take advantage of external economies, infrastructure and the consuming population. Simultaneously, these traditional export centres were also ports importing intermediate and capital goods (Melchoir, 1972:85). Meanwhile the relatively empty interior or depressed peripheral zones were ignored as spatial inequality increased. In the 1950s, import-substitution entered a new phase of development in South America. Pulled by the desire for a modern society, national spatial integration became a priority issue for South American politicians. As part of their post-war pursuit for national autonomy and socio-economic reforms, a new spatial organisation was desired. Thus, an attempt to break away from its 'peripheral status, external dominance and internal underdevelopment' was seen as a new form of integration, closely associated with the political mandate of modernisation (Wriggins, 1966; Appalraju and Safier, 1976). Having this obligation to fulfil, South American national governments played a key regulatory role in regional planning and, in particular, implementing resource frontier strategies.

Simultaneously, the political justification for regional planning was met by the desire to eradicate poverty that pervaded non-capitalistic sectors (United Nations, 1963:64). As a handy tool, the growth centre concept was used as a framework for
providing material progress. Apart from this macro-level objective, another physical feature of spatial development in South America – urban primacy – also needed attention.

**Intensified Urban Primacy**

Urban primacy is a direct consequence of the lack of regional integration between the main urban centre and its hinterland – a clear characteristic of unbalanced economic growth across space (Timberlake, 1987). Often viewed as a sign of underdevelopment or unhealthy economic development, the prominent feature of the intensified primacy is the continuous influx of migrants from rural and smaller urban areas to the primate city. In almost all cases, primate city regions are the principal core regions 'where economies are capable of exerting a far reaching ... influence on the development of their dependent peripheral areas' (Friedmann, 1968:162-163).

Urban primacy may be intensified in many ways. One of the chief factors observed in many South American primate cities is the presence of a low-wage labour force. Gwynne's (1986) study of Chile indicates that wage rates in Santiago were lower than the national average. Cheap labour was abundant and met the demand of undercapitalised small entrepreneurs. Also, primate cities have other advantages which provincial towns cannot offer such as credit facilities, infrastructure, airport service and electricity. In the export sector, primate cities facilitate contacts with multinational companies importing local products. Activities in both small enterprises and the export sector create opportunities for other informal activities, attracting as a result a permanent flow of poor people from less-developed and depressed regions. Continued intensification of urban primacy, however, created problems for the regime. In particular, a large-scale rural exodus results in squatter and slum areas in the larger cities. The challenge to the authorities emerging from these areas is only satisfied by material progress. Besides the risk of political instability, there are heavy demands on national governments to provide social and physical infrastructure. As the difference in South America between the city and the countryside has become marked, the focus of national planning has shifted to industry.
Pursuit for Industrial Expansion

Industrial expansion has been a key policy objective among South American nations. In 1954, a report of the Economic Commission for Latin America prepared under Raul Prebisch, showed particular concern about the limited income and low consumption levels as obstacles to achieving a high standard of living (ECLA, 1954:91). This concern was reflected in the uneven patterns of consumption between the upper social strata and the lower income groups in Latin America – the former (5 per cent) accounting for 30 per cent of the total consumption (United Nations, 1963:6).

By the early 1960s, import-substitution had encountered a series of barriers primarily due to the small size of domestic markets. Consequently, the application of the inward-looking strategy of import-substitution was not successful as evidenced by severe financial debts and general economic stagnation. Thus, an expanded and integrated economy between the coastal core and the relatively empty interior became ever more pressing. In South America, however, measures undertaken for territorial integration corresponded with each country's priority issues of development. As they differed between countries, the imported growth centre theory was shaped according to top-down decision-making plans – this was apparent in attempts at integrating underdeveloped regions in Brazil and Venezuela.

2. INTEGRATING THE FRONTIERS – BRAZIL AND VENEZUELA

Brazil and Venezuela emerged from the Second World War firmly committed to economic growth. Although they had many common features, their priority issues differed in a way that no ruling political party could ignore. Consequently, different resource frontier strategies emerged from similar economic circumstances.

Parallels

Both Brazil and Venezuela had vast portions of unexploited land until the late 1950s. Strongly convinced by Rostow's (1960) modernisation concept and the
'development ideology' initiated by the United Nations Economic Commission for Latin America since the 1950s (see ECLA, 1966), their political leaders shared the need to incorporate this ideology into nationalism, for which there was strong domestic political support. By integrating nationalism, economic development and rational planning, this ideology set up a basic democratic framework which could be justified (Friedmann, 1965:19-20; Roett, 1984). Having set this primary objective, unintegrated frontier regions were considered physical entities within which to expand the domestic product and strengthen political cohesion. Consequently, the SPVEA (Superintendency for the Amazonian Economic Support Plan) was created in Brazil in 1953. Having achieved little success due to the lack of funds (often reduced to 15 to 25 per cent of the initial budget) which was again subdivided among regional interest groups (Nascimento, 1985:262-63), it was subsequently replaced by SUDAM (Superintendency for the Development of the Amazon). Paralleling this institutional initiative – a regional development authority – the Guayana Development Corporation (CVG) was created in Venezuela in 1960. These institutions became the major implementing instruments for planning frontier regions.

Externally, Brazil and Venezuela perceived foreign aid (financial and technological) as an effective means of helping their national growth. Both, for example, had close involvement with the Ford Foundation and the United Nations. In close association with leading American universities, such as the 'MIT-Harvard Joint Centre for Urban Studies', Ford Foundation's involvement was pivotal in introducing growth centre strategies. From 1950 through to the 1960s, the Ford Foundation engaged large numbers of development planners in both its rural and urban development programs designed to assist the growth of less developed countries including Brazil and Venezuela. SUDENE's (Superintendency for the Development of the Northeast) 'Disaster Relief' program in Brazil reflected this typical case. In the mid-1960s, for instance, this regional authority brought in about 150 exerts from the United States Agency for International Development and 120 from the United Nations to work alongside 1,500 local professionals (Hansen, Higgins and Savoie, 1988:359). In Venezuela, the Guayana
Development Corporation employed a multi-disciplinary team from the MIT-Harvard Joint Centre for Urban Studies headed by Rodwin and Friedmann to undertake an intensive study from 1960 to 1965 (See Rodwin, 1969).

Looking at the two countries' frontier regions, there are some similarities apart from their tropical climate. Both the Amazon and the Guayana constitute a considerable portion of their national territory - the former covers 5.0 million square kilometres or 60 per cent of Brazil while the latter comprising 410,000 square kilometres or 45 per cent of Venezuela. Both have high hydroelectric power potential. Indeed, the continent has an estimated one-fifth of the world's total potential – a sound basis for supporting industrial development. Both regions are rich in mineral resources. The Amazon contains one of the world's richest mineral deposits in iron, aluminium, copper, tin, manganese, nickel and gold (Mendes, 1985:44). Similarly, there is a large quantity of high-grade iron ore in Guayana and promising deposits of manganese, nickel, chromium, gold, industrial diamonds, bauxite and aluminium laterite. Large reserves of petroleum and natural gas have also been discovered less than one hundred kilometres from Ciudad Guayana (Gwynne, 1986:114). Before we compare resource frontier policies in Brazil and Venezuela, we first examine why they have adopted two different approaches to regional development.

**Varied Regional Development Priorities**

Beginning in the 1950s, Brazil's development focus was centred on the depressed Northeast region rather than the Amazon frontiers (Figure 2.1). Conversely, in Venezuela, the Guayana frontiers received special attention after 1959 and were earmarked for economic expansion. Using Friedmann's classification, the Northeast of Brazil was a 'downward transitional' region – a result of the once prosperous sugar industry being overrun by its more competitive West Indian neighbours. In the nineteenth century, Brazil's economic core shifted to the Centre-South when coffee was developed near the Sao Paulo region and became the chief foreign exchange earner for more than a century. When Brazil started industrialisation in the Centre-South, the core regional belt
further expanded, thereby enlarging the gap with the Northeast. During the 1950s, the Northeast region, encompassing one-quarter of Brazil's population badly needed rehabilitation and assistance due to recurrent droughts. Consequently in 1959, SUDENE (Superintendency for the Development of the Northeast) was established to promote economic development. Within its 'Disaster Relief' program, it was estimated that 7.5 million people from the Northeast region should be moved as a precondition for improving the standards of living (Hansen, Higgins and Savoie, 1988:358). In order to divert this 'surplus' population away from the established Centre-South core region, there was a need to open up the Amazon to absorb them.

In contrast, the Venezuelan Guayana frontiers were set aside for a large-scale industrial expansion. Before the discovery of oil reserves in the early 1920s, Venezuela, like Brazil, had an agrarian pattern marked by specialised export crops such as coffee, cocoa and cattle (Friedmann, 1965). Following growth in oil revenues, urbanisation accelerated as more employment opportunities were made available in the manufacturing and tertiary sectors. Nonetheless, these two sectors were highly dependent on oil incomes. As Negron (1982:10) points out, the oil activity 'developed into an economic enclave where only direct internal impact was in the payment of wages ... [T]he potentially dynamic factor for the national economy was the returned value of oil exports rather than the oil activity itself. Moreover, fearing that atomic energy would replace oil as the main source of energy, Venezuela, in the 1950s, began to look for additional sources of growth besides oil (Blank, 1984:181). This threat was reflected by the mission from the International Bank for Reconstruction and Development (IBRD, 1961:18-22 and 62) to Venezuela in 1959 which suggested that the country had to seek other sources of growth. Recommending an industrial decentralisation policy, the mission praised Guayana as a potential region for industry in terms of its richly endowed minerals, oil and power resources.

Furthermore, during the dictatorial rule under General Perez Jimenez (1952-1958), the primacy of the Caracas region was intensified by a policy which attracted hundreds of
thousands of European immigrants. The concentration was so severe that decentralisation was considered essential (Myers, 1978:229-231). When Romulo Betancourt's Democratic Action Party took over in late 1958, they faced a severe unemployment rate of over 14 per cent. In the urban sector, manufacturing, which had a less significant role in the national economy, could only absorb a small proportion of the unemployed. Moreover, deriving its substantial support from outside Caracas, the new government had to enlarge its vision to the rest of the country. Given their urban middle-class background, the new ruling elites had 'a sense of mission' in modernisation. Having set up 'Cordiplan' as the central planning agency in late 1958, the new government invited economic elites, technocrats and foreign consultants to help promote industry away from Caracas (Ewell, 1984:134-137). A firm commitment to making Venezuela self-sufficient in heavy industry – steel, consumer durables and heavy machinery – had begun (Friedmann, 1965:5-12). Thus, Guiana's resource frontiers emerged as the region for fulfilling Venezuela's development mission.

Assured by oil revenues and having a much smaller population, Venezuela was not as concerned as Brazil over the problem of a limited domestic market. In 1965, Brazil's military government created a new 'Extraordinary Ministry for the Coordination of Regional Agencies (MECOR). Apart from pursuing a more efficient regional planning mechanism and seeking greater participation from the private sector, its regional development focus has been centred on eradicating rural marginality so that a larger proportion of the population could be gradually integrated into the modern sector. This focus is markedly different from Venezuela's more simplified approach. In the late 1960s, Brazil's Economic and Social Planning Institute (IPEA) adopted the 'concentrated decentralisation' concept as the base of its macro-regional policy. This model resembled the French development pole experience discussed in Chapter 1. It selected seven regional metropolises as new growth centres (Belem, Fortaleza, Recife, Salvador, Belo Horizonte, Curitiba and Porto Alegre) (Figure 2.1). These regional poles were assumed to counterbalance the national poles of São Paulo and Rio de Janeiro in the Centre-South.
 Nonetheless, because of its large size and a huge unincorporated rural population, these seven regional poles were seen as ineffective in integrating the marginalised areas, especially the poorly accessible inland zones. Hence, Brazil's Institute of Geography in 1967 assessed accessibility of rural population to existing centres using central place theory as an adjunct to the growth centre concept. This system grouped the urban areas into five categories. The criteria underpinning the hierarchy of central places were based on the variety or range of goods and services offered by each type of centres. While the largest category had a population of one million or more, the lowest category in interior regions was comprised of rural hamlets. These selected rural centres were assumed to perform simple functions as points of interaction and contact between the rural and urban areas (Babarovic, 1978:221-223). Interior settlements in the Amazonia, however, had a rural base and comprised less than 20,000 people.

In Venezuela, the original concept of developing Guayana coincided with Friedmann's (1966) spatial equilibrium theory. Accordingly, Guayana should have developed into one of the three first-order national core regions with a strong, heavy and export-oriented industrial base able to counteract the central core region of Caracas (Friedmann, 1966:222). Subordinated to these three national core regions were a series of second, third and fourth ordered subregions. Like the urban hierarchical classification in Brazil, the fourth ordered subregion consisted of local service centres. While most of the Amazonia was dominated by local service centres, the Guayana region was accorded a privileged position of a long-term metropolis core region. The marked contrast also led to different operations under the two regional development authorities in the Amazon and Guayana.

Operations of SUDAM (Brazil) and CVG (Venezuela)

Mineral and agricultural exploitation in Brazil's Amazon has a long history (Branford and Olock, 1985). But the new large-scale occupation of the Amazon was initiated by the Brazilian military-government when it came to power in 1964. With the
establishment of a special federal government agency – SUDAM in 1966, a large colonisation campaign was undertaken. SUDAM's main task was to act as 'a regional organisation [for] stimulating the process of the Amazon region and coordinating the consequent measures to be taken by the various official bodies, and the activities of private entrepreneurs' (Kleinpennig and Volbeda, 1985:6).

But Amazonia was not attractive to investors. As incentives, SUDAM initially offered participating companies an income tax deduction on investments of up to 50 per cent if the money was invested in any approved projects. In 1970, Brazil's First Development Plan (1970–1974) foreshadowed the construction of the Transamazon Highway linking the Northeast and the South Amazon. The objective was clear. The Highway would make potential migrants from the depressed Northeast region more accessible to the Amazon frontiers. The migrants would be mainly engaged in agricultural activities. Apparently, a nineteenth century American westward expansion was being repeated in the Amazon. By constantly pushing back the frontiers and relying on its rich resources and agricultural development, the United States of America had eventually created a strong integrated industrial economy. If the American experience could ever be reproduced, the Brazilian politicians and planners hoped, the Amazon would produce another story of success. If the American experience was characterised by a vigorous sense of settlers' spontaneity, the Amazonian expansion had strong state guidance and finance. Initially, the Amazon frontier was also planned to be initially subordinated to the Centre-South core region. Its urban development was not intended as a challenge to the existing core cities. In Venezuela, however, the Guayana frontier strategy was to create a new countervailing urban-industrial core region.

Established in 1960, the Guayana Development Corporation's (CVG) structure was virtually a prototype of the Tennessee Development Authority. But its objective was even more ambitious. Its primary task was to establish a new industrial pole, using local raw materials to initiate a steel mill as the leading sector. Moreover, apart from having to satisfy demands outlined in national plans, the Corporation also needed to coordinate all
socio-economic activities within the region (Rakowski, 1985:196). A new city – Ciudad Guayana – was to galvanise all sectors. By the time the region reached its industrial maturation stage, as Friedmann argued (1966), Guayana would become a supplementary core region. Instead of having mainly agricultural settlers as in the Amazon, Guayana would be populated by industrial workers who would create 'a strong and rising demand for raw materials, semi-finished products and consumer goods' (Friedmann, 1966:185).

Whether agricultural or industrial workers, Amazon and Guayana needed settlers as they were the basic means by which plans were implemented. It is, therefore, crucial to study the role of settlers and their experience in the frontier development adventures. Attention is focused on how they underwent social change through their active participation.

3. SETTLERS AND SOCIAL CHANGE

Different frontier policies have resulted in varied settlement patterns and lifestyles. A key factor in the Amazonian expansion has been Brazil's rural land problem. The post-war expansion in cash cropping and labour-extensive livestock operations has reduced subsistence farm areas and increased the number of landless people and rural unemployed. While Brazil's urban sector remained weak in absorbing migrants, the influx of the rural 'surplus' has depressed the real minimum monthly wage in the metropolitan areas. Consequently, an appalling rate of malnutrition and substandard living conditions have been widespread (Mougeot, 1985:52-58).

Equally pressing has been the increase of 1.5 million youths into the job market every year. As a means of tackling this problem, the Amazon was designated as an opportunity region of land and employment. Simultaneously, the region was also used to ease the pressing demand of the rural poor for more radical land reform against an earlier adoption of Estatuto da Terra – a rather gentle land reform act undertaken by the military government in 1964 (Nascimento; 1985:Chapter V). Identically, Venezuela's inequality in land ownership was even more severe. Land reform between 1960 and 1980 had been 'symbolic, rather than real', and more than 70 percent of agricultural land was still
controlled by less than 2 per cent of landowners (Blank, 1984:190-91). Guayana provided settlers with opportunities for employment. But land was not offered as the basis for improving their livelihood. Instead, the Guayana settlers had to subjugate their interests to the nation’s economic ambitions. Because of this basic difference, investment in settlers on a per capita basis was far superior in Guayana than in the Amazon. The difference was reflected in their settlement patterns and livelihood.

Settlement Patterns and Settlers’ Livelihood

Basically, the Brazilian government built two types of settlement on the frontiers: (a) urban administrative centres; and (b) agrovilas (agricultural villages). Urban networks and equipment in the regional centres were generally poor because of the Amazon’s vastness and lack of adequate capital (most being loans taken from international financial institutions). Away from the urban centres, the picture was again different. With emphasis on land occupation, the colonisation movement was a highly mobile one. The strategy encouraged spontaneous settlements, using highways and feeder roads to guide colonial penetrations.

There were two ways by which spontaneous settlers sheltered themselves. Either they built their own houses on the land which they cultivated or were accommodated in the agrovilas or ‘rural growth centres’. The latter were settlements built under SUDAM’s ‘Polamazónia Program’, which, beginning in 1975, had selected 16 ‘growth poles’ and constructed more than 120 ‘rural growth centres’ — agro-cattle and agro-mineral settlements. While the former poles were primarily urban centres offering higher levels of goods and services, the latter were expected to expand non-agricultural activities through agricultural improvement in the hinterland. Located at the lowest level of settlement built along the roads, the rural centres were mostly taken up by spontaneous migrants. They arrived at their own initiative and expense and comprised the largest number of settlers. In the rural centres where they lived, their skills and resources could scarcely be mobilised because of poor infrastructure and high costs of transporting the produce to distant coastal markets. Frequently, surplus farm produce was wasted.
Agrovilas were often temporarily occupied and abandoned due to defaults on bank loans, poor health and educational services and difficulties in getting agricultural inputs, despite efforts by INCRA (National Institute for Colonisation and Agrarian Reform) in distributing hundreds of thousands of land deeds (100 hectares each) to spontaneous migrants (Moran, 1985:95-96). Moreover, much confusion and corruption over land titles were reported, often leading to conflicts or eviction by ranchers or other big landlords (Mougeot, 1985:66; Nascimento, 1985). Few alternatives were found to reabsorb the displaced (Bunker, 1985). Consequently, many migrants took up temporary or seasonal jobs in resource-exploiting projects or by providing services to residents of existing towns. They became increasingly subordinated to big land-owning groups who benefited most from government incentives and the rise of land values (Becker, 1981). Apart from the small spontaneous migrants – mostly widely dispersed and subsisting on a small-scale agricultural economy – there were highly capitalised large-scale ranchers. A few hundred agro-business projects have been in operation in the Amazon using fiscal incentives offered by SUDAM. Between 1967 and 1982, agro-business projects absorbed most of SUDAM's incentives totalling US$10-12 billion (Mendes, 1982:48).

A third type of settlement was related to mineral exploitation and the construction of roads and hydroelectric plants. Among the hydroelectric plants, the largest one named 'Tucurui' is being constructed across the Tocantins river. When completed, it will be the fourth largest plant in the world, generating 4,000 megawatts of electricity. A large proportion of it will be used for processing and refining locally extracted bauxite into aluminium (Mendes, 1982:45). There were about 35,000 technicians and labourers in the Tucurui project alone. New towns sprang up where big projects were established. The picture changes markedly, however, when we shift to the Guayana region.

The Guayana settlers were less mobile and were systematically incorporated into a comprehensive regional program. With prospects offering a rise in standards of living, the program attracted thousands of skilled personnel from outside the region. Here, minerals extracted were used by local industries, whose volume of production was
determined by demand in the Valencia-Caracas region and abroad. With heavy investment by Venezuela in a much smaller region, an average Guayana settler enjoyed a higher standard of living than most of their Amazon counterparts. In the vast Amazon frontier, the residential segregation was more marked between towns and countryside. This was vividly described by Mougeot (1985).

Mougeot's (1985) findings reveal that the Amazon reflected a continuous flow of settlers searching for advancement. Their move was strongly guided by educational levels, occupational skills and the will to compete in a complex process of frontier expansion initiated by the state. Economic motives, according to Mougeot, were the most important stimuli for settlers who preferred to live in larger frontier towns than in rural zones. Yet competition in occupying higher status jobs in larger cities was strong between incoming cityward settlers and rural and urban dwellers who arrived earlier. With few skills and lower educational standards, the earlier dwellers and their weaker counterparts in urban areas usually lost out. They were forced to move to lower-order centres or to 'escape to less disputed environments, namely the countryside, in order to hold on to previous attainment or undergo some progress' (Mougeot, 1985:81). More peaceful, lower-order centres provided less skilled settlers with better access to land for their subsistence livelihood whereas an urban occupation might make their life insecure or difficult to support household expenses.

Conversely, the Guayana frontiers were much less competitive. Under the management of the Guayana Development Corporation, the region's role was to use capital-intensive, modern technology to produce basic metals, petrochemicals, electrochemicals and heavy machinery. By investing in heavy industries, the state hoped that private undertakings in medium and light industries would benefit and expand from a trickle-down process. Unlike the Amazon settlers, a 1975 figure indicates that the Guayana migrants worked predominantly in the secondary (44 per cent) and tertiary (50 per cent) sectors. Only 6 per cent earned their livelihood out of mining and agriculture (MacDonald, 1979:66-67). Within Ciudad Guayana, the 'living space' of settlers was
also organised according to their income, educational levels and skills — a social segregation epitomised within a single city.

Compared to the Amazon's spontaneous settlers, Guayana's migrants had a better preparation before heading to their ultimate destination. Comprising rural and peasant stock from eastern Venezuela, they were gradually attracted to and converged on the city through their kinship networks. These networks led them on arrival in Ciudad Guayana to settle in three different types of quarters: (a) 'urbanizaciones' — planned quarters with urban facilities; (b) 'barrios' houses — semi-planned quarters with some urban facilities; and (c) 'shanties' — unplanned quarters with low quality houses and little public facilities. The 'urbanizaciones' were first built in the 1950s by an American iron ore mining company to accommodate its staff whereas most shanties were put up by poor settlers during the early 1960s attracted by job opportunities that the Guayana project would offer (Rodwin, 1969).

Initially, Guayana's heavy industrial project had little to offer these unskilled 'squatters'. Given time, some of them picked up skills and were able to move on to more demanding occupations. There was also a shift from low-ranking white-collar jobs to blue-collar jobs for higher incomes, though the latter had lower social prestige. Hence, mobility was frequent as shanty dwellers earned higher incomes and shifted to 'barrios' and 'urbanizaciones'. The proportion of 'urbanizaciones' increased from 14 per cent in 1965 to 38 per cent in 1975, while 'barrios' and 'shanties' each accounted for 31 per cent. Indeed, the population of the shanties has been increasingly isolated as 'successful ones' moved out whenever possible. The remainder were 'those with lowest status occupations, the unskilled, non-corporate workers; the long-term unemployed, migrants from rural areas and those from farming with no prior experience' (MacDonald, 1979:42). Having discussed the difference in settlement strategy and settlers' frontier livelihood, we proceed to evaluate the achievement and constraints in the Amazon and Guayana frontiers.
Development Achievements and Constraints

Both the Amazon and Guayana experienced a fast rate of population growth. Between 1970 and 1980, the Amazon's population increased from 7.15 million to 11.2 million—an annual growth rate of 5 per cent compared with Brazil's national average of 2.7 per cent (Kleinpenning and Volbeda, 1985; Mendes, 1982). Since Guayana became the focus of migration, its population rose from 213,540 in 1961 to 391,660 in 1971. Ciudad Guayana alone saw an increase of 485 per cent in ten years, from 29,500 in 1961 to 143,240 in 1971 (MacDonald, 1979). This growth provided the two frontier regions with the essential manpower for development.

As stated earlier, both the Amazon and the Guayana regions produce large quantities of electric power for domestic and industrial use. Brazil's Amazon expansion has been multi-purpose—spatial, political, economic, social and demographic. Yet, despite such a large-scale expansion, the pivot of Brazil's economic development has remained in the existing coastal centres, not in the frontiers. The coastal regions have attracted heavy industrial poles based on the location of the highly preferred automobile industry. With five multinationals (Chrysler, Ford, General Motors, Mercedes Benz and Volkswagen) investing in its car industry, Brazil consolidated its position as South America's industrial base (Gwynne, 1986:65-66). This position has not dampened the strong growth 'mania' which has been at the expense of natural conservation (Mendes, 1982:52). Focused on agricultural colonisation and mining activities, economic growth on the frontier has been centred on farms, thereby allowing the Brazilian government to save considerable infrastructural costs. The role of private capital has been more significant than in Guayana. By Brazil's overall standard of urbanisation, the Amazon has been relatively rural. Major cities located in the coastal zone have experienced a faster rate of urbanisation than the interior's urban centres. In contrast, by focusing on Ciudad Guayana the Guayana development has not generated a strong and continuous movement across the region. Almost all industrial activities started from the city and expanded from
there. Consequently, the public investment cost on a per capita basis has been much higher than in the Amazonian expansion.

There have been achievements on many fronts. The Amazon is producing more than 35 million tonnes of iron ore per year. Moreover, it is realising large quantities of bauxite and cattle to meet domestic and international demand. Foreign exchange earnings have been used to repay and service a foreign debt of more than US$130 billion – much of it had been used to finance Amazonian projects. By 1990, Brazil is expected to boost its exports by an annual growth rate of 5 to 7 per cent (Skillings, 1985:40). Since 1979, Venalum, a state-owned aluminium plant in Venezuela's Ciudad Guayana, has become the world's largest smelter, with an annual processing capacity of 280,000 tonnes. Another new industrial subsidiary of the state-owned Venezuelan Guayana Corporation (Interalumina) is about to be launched. This plant will have a capacity to process one million tonnes of alumina per annum. When completed, Venezuela will be the first country in the Third World possessing a fully-integrated aluminium industrial complex that is able to undertake all three stages from extraction of bauxite, production of alumina and then aluminium. In addition, Guayana possesses other basic heavy industrial sectors – oil, steel, petrochemical and electrical supplies supplying inputs for a wide range of manufacturing sectors in the country (Gwynne, 1986:52).

Nevertheless, there have been constraints. Amazonian development has been handicapped by high costs and inefficient transport systems, lack of skilled managers, entrepreneurs, technical experts, basic public services and infrastructure. Because of its agricultural character, the development has suffered from poor and fluctuating world market prices. The largest towns have been dependent upon non-basic activities which merely offer higher levels of goods and services. No significant industries have been established compared to the Centre-South core region. Though the agrovilas in the Amazon have been described as 'rural growth centres', they are the simplest form of settlement for human shelter. They have had little effect on either innovational diffusion or trickle-down effects from Brazil's coastal core regions. Cattle ranching – the main
activity – has generated few backward and-forward linkages. Consequently, there has been little employment generation (Nascimento, 1985:302). As Moran points out (1985:97), 'the Amazon remains a backwater of the national budget, despite the apparent importance given to it with regard to the achievement of greatness in the national ideologies.' The coastal core regions would be given even stronger dominance following physical integration made possible by huge investments. Perhaps more pressing have been the environmental impacts. The disappearance of vast areas of tropical rain forests in the Amazon has aroused increased international concern about the 'green-house effects' at a global scale, coupled with the irreversible decline in species and natural resources.

In Venezuela, the national economy is still strongly dependent on oil which, in 1981, provided 70 per cent of tax revenues. Oil revenues are being used to import half of the nation's need in basic food items and to raise substantial foreign loans to subsidise its industrial projects (Blank, 1984:3). Having a large share of the national budget, the Guayana absorbed almost US$8 billion for developing its industry and infrastructure during Venezuela's Fifth Plan (1976-80) (Gwynne, 1986). Initiated as a 'dynamic growth pole', Ciudad Guayana has been effective in creating jobs and high-quality industrial and mineral outputs. But without huge investment by the state, this would have been impossible. Further, Ciudad Guayana does not have any locational advantage for steel and aluminium users concentrated on the Valencia-Caracas axis along the northern coast. Thus, large users in the north's traditional core regions prefer to take resources located close to their industrial complexes. Due to lack of a threshold demand in the new frontier region, Guayana has had to import consumer goods from other parts of the country or from abroad (Stöhr, 1975:154). Since the 1980s, investments in Guayana have begun to decline which has affected smaller projects. The larger projects have not expanded. The Guayana region has yet to generate trickle-down effects.

Apart from the above assessment, economic growth through the use of industrial poles in Venezuela or rural growth centres in Brazil may only be one of several overall
development objectives. Simultaneously, their frontier activities have served other socio-political goals. Since 1975, both the Amazon and the Guayana have experienced an increased level of state control in their major economic activities. Consequently, there has been a serious lack of devolution. In the Guayana especially, all major decision-making hinges on Caracas. In the process, settlers have been the prime-movers serving various objectives including their own.

Our discussion of settlers' life in the Amazonian and Guayana frontier development programs, however, has been brief for lack of access of data sources produced in local languages. It also lacks a comparative perspective indicating how settlers' life patterns evolved before and after they moved in the process of being incorporated in their respective country's frontier regional planning program. This perspective will be brought to light when we undertake to study FELDA settlers in Malaysia later in the thesis.

Resume

This chapter has studied the experience of applying resource frontier strategies in South America. The key motivating factors were the poorly integrated national territory, increased urban primacy and the pursuit of industrial expansion on the continent. Taking Brazil and Venezuela as two case studies, we found that there were similarities. Both have vast tropical underdeveloped areas with rich mineral and hydroelectric resources; and national leaders adhering to 'development ideology' initiated by the Economic Commission for Latin America and close associations with international aid agencies offering technical and financial assistance in their development programs. Because of differing priorities, Brazil undertook a basically rural agricultural strategy whereas Venezuela used an urban-industrial one. In Brazil, the Northeast depressed region needed immediate attention to redistribute its 'surplus' population and overcome the rural poor's low consumption rate. These twin problems were considered an obstacle to expanding the economies of the coastal core regions. Moreover, the Amazon was used to divert the pressure for radical land reform. Although growth poles and rural growth centres were established in the Amazon, they only supplied basic services. Conversely, supported by
oil revenues, Venezuela was committed to build an urban-industrial pole in a new frontier city – Ciudad Guayana. When mature, the Guayana region was expected to become a supplementary core region counterbalancing the Caracas region. Both the Amazon and the Guayana have experienced strong state involvement. Given the Amazon's scale, the capital derived from the state has been much higher than in the Guayana.

In the light of two different strategies, each country's migrants had varied settlement patterns. Spontaneous migrants in the Amazon were numerous but did not improve their lot to any significant extent. They had to work hard to find an appropriate shelter. Those without occupational skills and education usually lost out and were forced to live in the countryside. Conversely, those in the upper echelons – big ranchers and miners were favoured by the frontier policy. In Ciudad Guayana, the mobility of settlers also reflected their skills or ability to compete for jobs. Indeed, their social status in the city was reflected in the standards of their living quarters. Both the Amazon and the Guayana have now experienced a heavy influx of population. Both regions have also been able to boost their share of gross domestic product: minerals, agricultural produce and power in the Amazon and, minerals and industrial products in the Guayana. Nonetheless, the Amazon has remained a backwater of Brazil's national development while the Guayana's remoteness has limited its economic progress. These findings have important implications for Malaysia in particular as, like Brazil and Venezuela, it has closely followed development concepts of the West.
CHAPTER 3

THE RESOURCE FRONTIER STRATEGY
IN PENINSULAR MALAYSIA

The conflict posed by ethnic mobilization forces dominant political elites to devise and experiment with various public policy strategies, both to harness and to control ethnic conflicts, which in many cases are the product of failed policies of an earlier era and of ineffective political institutions. (Means, 1986:95).

The precedent of Venezuela and Brazil's frontier experience has paved the way to the study of Malaysia's resource frontier strategy. There was a direct link between the Friedmann package in South America and Malaysia – both areas being strongly exposed to international development concepts at the governmental level. Expatriate advisers and local senior staff at Malaysia's main national planning agency – the Economic Planning Unit – placed the growth centre concept on the development agenda since the early 1970s. This link had a more direct impact than on neighbouring Indonesia, Thailand or the Philippines. In contrast, use of the term 'development pole', 'growth pole' or 'growth centre' in official documents of those countries was either vague or had little meaning in the implementation of their frontier development projects. Perhaps due to budgetary constraints, their investment for infrastructure and facilities per household was much smaller than in Malaysia. Consequently, the conceptual and practical link between South America and Malaysia was more coherent and vigorous, and Indonesia, Thailand and the Philippines can be omitted from the thesis.

Like those of Brazil and Venezuela, Malaysia's development strategies reflect the country's dominant problems – poverty, ethnic conflict and regional inequality in wealth. As a means of combating rural poverty, FELDA (Federal Land Development Authority) was established in 1956. Subsequently, other institutions were also created to tackle a range of problems and promote Malay interests. Then in 1970, the New Economic policy (NEP) pinpointed the urban and regional dimensions of poverty, particularly among the
Malays. This policy highlighted the need for new technical tools and administrative mechanisms. The requirement was met, in part, by a resource frontier strategy fashioned by combining the growth centre concept with frontier agricultural programs (FELDA in particular)—the technical tool and administrative mechanism respectively. In the process, regional development authorities were set up to assist the resource frontier development aimed at inducing urbanisation and industrialisation. Indeed, they were the integral part of the government's effort to redistribute resources more equitably among the different ethnic groups.

In considering this resource frontier strategy in more detail, two critical issues have to be addressed: why did Malaysia adopt a growth centre concept; and how has it been incorporated into the strategy to fit in with Malaysia's socio-political framework? Once these basic questions have been addressed, we need to consider a linking issue: what was the source of the ideas on the resource frontier strategy?

In analysing these issues, we have to examine the background of the adoption of a resource frontier strategy in Malaysia, noting political, economic and social problems before 1969 (Section 1). Subsequently, we examine how the growth centre concept was introduced and incorporated within the NEP to urbanise the rural (largely Malay) poor—a task high on the agenda of the United Malay National Organisation (UMNO) (Section 2). Finally, we explore why regional development authorities were needed to implement the resource frontier strategy in Malaysia (Section 3) — a prelude to considering the role played by the regional development authorities within the national planning framework and how regional planners perform their task on the field in Chapter 4.

1. PROBLEMS IN SEARCH OF A STRATEGY, 1946-1969

Malaysia's post-war history has been punctuated by problems concerning the peasantry and its longstanding endemic indebtedness, recurrent political unrest and the perennial search for economic expansion. Consequently, there has been a pressing need
for measures to resolve these issues. This section, therefore, sets out to examine the origins of the New Economic Policy formulated in 1970, which came to incorporate and crystallize the resource-frontier strategy. The emergence of UMNO, however, was a product of political instability of the immediate post-war era in Malaya.

Political Instability, 1946-57

Immediately after the Second World War, two crucial events arose on the political scene in Malaya – the Malayan Union Constitution and the local Chinese Communist-led 'Emergency'. The outcome of these two incidents laid the foundation for strongly ethnic-oriented national development policies.

In August 1945, the defeat of the Japanese left an adverse legacy in Malaya – a rise in nationalist feelings among the Malay intelligentsia and heightened inter-communal distrust (O'Ballance, 1966). At this juncture, the British returned, accepting the inevitability of self-determination, and promoting it through a new Malayan Union Constitution. Conceived as a preliminary plan for local self-government on the basis of a parliamentary system (Ongkili, 1985; Sopiee, 1974), the Constitution suggested a merger of all states in the Malay Peninsula into one union and offered all races equal citizenship. It also proposed to strip off the jurisdiction of Malay Rulers' special rights over land and thus divert the focus of traditional Malay loyalty from them¹. To their great disappointment and fear, the Malay nationalists saw the Union proposal as a threat to the sovereignty of Malays as an indigenous people and therefore:

'a death blow to their status in their homeland. They feel that it would drive them back to the unprogressive kampungs, where they and their civilization are eventually bound to perish (Department of Malayan Union Affairs, 1974:4).

Strong protests came first from the Malay elites led by Dato Onn bin Jaafar. Under his leadership, UMNO was created in May 1946 to oppose the Union. Supported by 70 to 80 per cent of the Malay population, UMNO succeeded in aligning the aristocracy and

¹ It was widely believed that this arrangement was a punitive action to the Rulers who had collaborated with the Japanese during the occupation (Sopiee, 1974; Purcell, 1984).
peasantry (Purcell, 1954:53). In the face of demonstrations and protests, the British colonial government was finally forced to withdraw the Malayan Union Constitution. Subsequently in July 1946, a Working Committee was set up to amend the Constitution and resume Malay rights under a new Federal Constitution. Among the 12 members of this Committee, none represented the interests of the non-Malay ethnic groups2 (Sopiee, 1974:37). UMNO thus had used its peasant power base to secure important concessions from the colonial state and enshrine Malay interests in any future constitutional settlement. Moreover, such demands were reinforced by the subsequent outbreak of the 'Emergency' in 1948, a rebellion led by the predominantly Chinese-led Communist forces.

The Emergency meant that the colonial government had to choose a closer alliance with UMNO and the Malay elites, especially as the Chinese population failed to respond to the call for mobilisation. Because the Communist partisans were overwhelmingly Chinese, it was also a common view for the Malay elites to identify the Communist menace as a 'Chinese threat' (Ratnam, 1965). Indeed, all achievements gained by UMNO over the Malayan Union issue could have been lost should the Communists have won their cause. The Emergency also forced the British to take interest in transforming the Malay peasantry for strategic reasons. In 1948, fearing that their poverty issue would be exploited by the Communists, the colonial government accepted UMNO's demands to draw the Malay population more fully into the country's mainstream economy by gradually bringing them to the modern agricultural and urban sectors (Antrobus, 1989:6). A grant of 10 million pounds was also requested for assisting the Malay peasants (Ratnam, 1965:146), and the Rural and Industrial Development Authority (RIDA) was formed in 1950.

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2 There were protests from non-Malay organisations such as the Pan-Malayan Council of Joint-Action (PMCIAC) formed in December 1946 to express their disagreement to the Federation alternative. With Tan Cheng Lock as chairman, this organisation comprised very diverse political groups and was too loose and divided to have any influence on the Working Committee. The new Federal Constitution was finally passed in February 1948.
Moreover, to the government armed forces, the frontier lands which sheltered the insurgents needed to be dealt with from a political and military perspective. Consequently, clearing the jungle and securing the frontier was part of the strategic deployment to combat the Communist partisans and strengthen the state (Bahri and Parera, 1977).

Thus, political instability before Independence in 1957 provided a strong impetus to the adoption of a resource frontier strategy. Ethnic politics and the rise of UMNO pinpointed the Malay peasantry as the main recipients of any strategy while the Emergency highlighted several other concerns: rapid economic growth would have to be pursued as an alternative to the ideological challenge of Communism; and the remote frontiers would have to be transformed into the locus of development initiatives. These concerns were to be further sharpened after Independence when local ruling elites began to assume the mandate of modernising a new nation-state.

Poverty and the Malay Peasantry, 1955-69

With the approach of Independence and development of ethnic politics, another key problem – widespread poverty among the Malay peasants – achieved prominence and attracted the attention of both colonial and post-independence governments. It needed more attention because the peasantry was able to exercise its considerable power through the poll – the impact was first felt in the general elections of 1955.

During the colonial period, there were basically two contrasting sectors within the rural economy: (a) a slowly growing modern plantation and mining sector buoyed by improved productivity based on imported technology; and (b) a stagnant traditional peasant sector (Ness, 1967; Sundaram, 1986). Being neglected and peripheralised in the process of modernisation, the peasants lived in subsistence and were under constant

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3 The 1955 general elections actually marked the peaceful transfer of power from the British to the local elites represented in an alliance which was led by United Malays National Organisation, but included the Malayan Chinese Association and Malayan Indian Congress. Following their victory, the transfer was formalised with independence in 1957.
threat of indebtedness, low productivity, unfavourable marketing arrangements and insecurity of tenure' (Lim, 1977:225). Generally, peasants were isolated from mainstream economic activities and lack of supporting infrastructure, some with surplus rice or commercial crops benefited marginally from the exchange economy.

Added to this problem of subsistence peasantry was the fragmentation issue rooted in land inheritance. Whether by Islamic law of inheritance or by customary law, the size of inherited land shared among heirs often became uneconomic (Wilson, 1958; Aziz, 1965; Fujimoto, 1983). The 'Agricultural Census of Malaya' conducted in 1960 reflected the land fragmentation and landlessness of the post-war peasantry. According to the Census, there was a marked disparity in land ownership. About 55 per cent of all cultivated land within the country was owned by 20 per cent of land owners (estates of over 40 hectares) (Bahrin, 1975:2). Conversely, there were 545,000 smallholders in the country whose land size fell below 40 hectares. Almost half owned less than 1.2 hectares and the majority of them were Malays (Ali, 1983; Wafa, 1972). Moreover, most of these small parcels of land were concentrated in the rice growing areas in Perlis, Kedah and Kelantan. More than half of the rubber and rice farmers were tenants who had to pay from one-third to one-half of their harvest to the landlords. Indeed, more than 400,000 (i.e half of the Malay working population) depended on small rice farms for their livelihood (Aziz, 1975:21).

Poverty and land hunger problems were particularly widespread in rural areas where Malays were dominant. Underemployment was common and demand for land had not been met. By the mid-1950s, there were 100,000 or more applications for land titles held up in various land offices in Malaya (MacAndrews, 1978:6). Under the colonial rule, relief of land hunger by redistribution of large estates owned by foreign interests or any other form of expropriation was avoided. Consequently, the state sought to open up jungle lands which still covered 80 per cent of the Malay Peninsula as an alternative, and modern cash crop agriculture was adopted to promote Malay agricultural development.
Before 1969, however, efforts by the state to improve Malay economic interests remained piecemeal and lacked spatial focus. This deficiency had its origin from the post-war Draft Development Plan of 1950 which concentrated on sectoral development – basically agricultural (MacKenzie, 1951). The Plan was supplemented by a Mission from the World Bank in 1954 (IBRD, 1955). The Mission’s report had had far-reaching impacts on development orientations in both agriculture and industry. Based on Malaya’s existing economic potential, the Mission recommended to boost aggregate growth – a typical macro-strategy of the 1950s. Impressed by agriculture's position in the export trade and in the gross national product (50 per cent), the Mission strongly suggested expanding high-yielding rubber cultivation and undertaking a diversification program to include rice, oil palm and cocoa (IBRD, 1955:21). Consequently in 1955, the Economic Secretariat (1956:vi) formulated a public policy to:

‘increase National Income, output and wealth – and to do so in directions which will contribute substantial Revenue to the Budget. This means Rubber, Tin and other Mining, new Industries and the opening up of new land [italics added].

Thus, on the rural front, FELDA was set up in 1956 as a state-sponsored operation to manage smallholder development to bolster growth and to relieve rural poverty. It had many advantages; individual land ownership was offered as an incentive; there was little financial risk with government support; measures were undertaken to foster the traditional spirit of ‘gotong royong’ (mutual help) and to avoid field negligence; and, because of its relatively large scale, the scheme was operated as an agri-business. Besides FELDA, the UMNO-led government also created other institutions to promote rural development, especially after the 1959 general election, where many Malay votes were lost to the challenging Pan Malayan Islamic Party in the rural areas (Kassim, 1979). Among them, FAMA (Federal Agricultural Marketing Authority) was set up in 1965 to promote marketing of rural produce so as to improve farmers and fishermen’s bargaining

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4 Self-sufficiency in rice production, according to the Mission’s report, was not encouraged mainly due to financial and soil suitability reasons.
5 A central planning agency formed at the initiative of the IBRD Mission in 1954.
power, quality of output and to break middlemen’s monopsony. In 1966, FELCRA (Federal Land Consolidation and Rehabilitation Authority) was created to rehabilitate and improve agricultural holdings by introducing modern agricultural practices and developing new areas on the fringes. Further, MARDI (Malaysian Agricultural Research and Development Institute) emerged in 1968 to undertake research of various crops apart from rubber, livestock, poultry and freshwater fisheries (Ongkili, 1985:225).

There was, however, less effort being made in the urban areas to promote Malay interests in commerce and industry. Few Malays benefited from the adoption of the Pioneer Industries Ordinance in 1958 which provided incentives for manufacturing import-substitution goods. The same was true with the creation of the Malayan Industrial Development Finance Berhad (MIDP) in 1960, whose task was to provide medium and long term capital to entrepreneurs of manufacturing. In 1965, the Malay entrepreneurial class within UMNO demanded that unless the government intervened in the private sector, they would have little chance of success in business (Baharuddin, 1986:190). Their demand accelerated the establishment in 1966 of Majlis Amanah Raayat (MARA) — the Council of Trust for Indigenous People. It replaced the ineffective RIDA. With a new organisational structure, MARA’s responsibility has been much larger. It has since become the largest supplier of loans in various forms to Malay entrepreneurs6. With its focus centred on helping small enterprises, MARA also provides advisory, training, education and technical and management services (Chee, 1986:93-94).

Despite these efforts promoting Malay interests in both rural and urban sectors, the economic gap between Malays and non-Malays as a whole remained large. The ‘Investment Incentives Act’ of 1968 which granted exemptions of company tax, relief from pay-roll tax and export incentives to firms established outside the Kelang Valley had benefited more foreign and non-Malay investors. Yet, large numbers of Malay peasants

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6 Up to 1982, MARA approved 60,260 loans amounting to $388 million — most of these loans were, however, of less than $5,000 and 60 per cent without security (Chee, 1986:92-93).
were virtually unaffected by this strategy of industrial dispersal. They remained poor and at the bottom of the country's socio-economic hierarchy.

Racial Inequality and the NEP

The relative lack of achievement made by the Malay peasantry, middle class and UMNO's elites contributed to mounting frustrations in the face of a rising inter-communal inequalities. Their dismay was further agitated when the economically stronger ethnic Chinese demanded a greater share of political power as reflected by the Democratic Action Party's winning of a large number of parliamentary seats in the May 1969 election (Gale, 1981:26-29). When the racial riots broke out on May 13, parliamentary proceedings were suspended and all decisions related to national matters were assumed by the National Operations Council headed by Tun Abdul Razak who became Prime Minister from 1970 to 1976. The Council's primary task was again to put the Malay poverty issue on the forum.

The magnitude of inequalities between Chinese and Malay was apparent. Their disparities also had direct regional parallels (Table 3.1). In 1970, the per capita income in Peninsular Malaysia was lowest in Malay dominated states – Kelantan, Trengganu, Kedah and Perlis. Between the richest state of Selangor and the poorest state of Kelantan, the disparity was 3.5 times in per capita income. The Malays made up 74 per cent of poor households compared to 17 per cent for Chinese and 9 per cent for Indians and others (Government of Malaysia, 1976:180). Moreover, about 85 per cent of the Malay population was rural compared to 48 per cent for the Chinese and 35 per cent for the Indians. The Malays owned only 1.5 per cent of all share capital of limited companies compared to 62 per cent owned by foreign companies and the remainder by local Chinese

7 For a detailed account of the event, see Ongkili, 1985:199-209.
### Table 3.1

<table>
<thead>
<tr>
<th>State</th>
<th>GDP* ($Million)</th>
<th>Population (000)</th>
<th>Per Capita GDP ($)</th>
<th>Ratio to Malaysian Average</th>
<th>Percentage of Malay Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johor</td>
<td>1,913.9</td>
<td>1,277</td>
<td>900.4</td>
<td>0.91</td>
<td>53.4</td>
</tr>
<tr>
<td>Kedah/Perlis</td>
<td>743.3</td>
<td>1,076</td>
<td>665.4</td>
<td>0.67</td>
<td>71.5</td>
</tr>
<tr>
<td>Kelantan</td>
<td>329.6</td>
<td>686</td>
<td>462.9</td>
<td>0.47</td>
<td>92.4</td>
</tr>
<tr>
<td>Melaka</td>
<td>334.5</td>
<td>404</td>
<td>798.3</td>
<td>0.80</td>
<td>51.8</td>
</tr>
<tr>
<td>Negri Sembilan</td>
<td>489.7</td>
<td>481</td>
<td>979.4</td>
<td>0.99</td>
<td>45.3</td>
</tr>
<tr>
<td>Pahang</td>
<td>512.0</td>
<td>505</td>
<td>975.2</td>
<td>0.98</td>
<td>61.2</td>
</tr>
<tr>
<td>Penang</td>
<td>794.7</td>
<td>775</td>
<td>987.2</td>
<td>0.99</td>
<td>30.6</td>
</tr>
<tr>
<td>Perak</td>
<td>1,598.2</td>
<td>1,569</td>
<td>981.1</td>
<td>0.99</td>
<td>43.0</td>
</tr>
<tr>
<td>Selangor</td>
<td>2,736.7</td>
<td>1,631</td>
<td>1,616.5</td>
<td>1.63</td>
<td>34.5</td>
</tr>
<tr>
<td>Trengganu</td>
<td>249.1</td>
<td>406</td>
<td>591.7</td>
<td>0.60</td>
<td>93.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8,981.7</strong></td>
<td><strong>8,810</strong></td>
<td><strong>895.8</strong></td>
<td><strong>1.00</strong></td>
<td><strong>53.1</strong></td>
</tr>
</tbody>
</table>

*Gross domestic product.  
Average for Peninsular Malaysia, taken as 1.00.

**Source:** Government of Malaysia, 1971a; 1976:201 (adjusted).

By 1970, indeed, the UMNO ruling elites and their supporters owned little of the modern sector, a situation in sharp contrast to the MCA (Malaysian Chinese Association) leaders who had originated from business circles. UMNO's small economic gains were markedly disproportionate to their overwhelming political power. With political power
more secure in the late 1960s, it was no longer necessary for UMNO elites to keep the 'compromise' with a weakened MCA.8

The modern sectors, however, were largely urban-based. Thus, the New Economic Policy (NEP) was formulated in 1970 to intensify development programs to benefit UMNO's supporters through a strongly interventionist approach. The policy associated the Malay poverty issue with spatial and ethnic features in stressing two objectives: (a) to eradicate poverty regardless of race; and (b) to restructure society so as to eventually eliminate the identification of race with economic function and geographic location (Government of Malaysia, 1976:7). The second objective was particularly targeted at raising the Malays' participation in urban modern sectors and is related to the urbanisation process. Enhanced access to modern urban services, therefore, was interpreted as a method of reducing the incidence of Malay poverty. The NEP became the blueprint for government policy which thereafter was committed to both economic modernisation and ethnic redistribution.

Hence, by 1970, Malaysia faced a number of critical problems. These were issues which had arisen in the post-war period but had not been resolved, and in some cases, had even become more acute after a decade of Independence. Poverty and landlessness still haunted the rural masses and new land settlement and improved standards of living were vital to their alleviation. Such absolute poverty was compounded by distribution in both ethnic and spatial terms. Malays fared worse than others; rural areas lagged behind the cities; and regionally, the Malay-dominated east coast states were poorer than the Chinese-dominated west coast states. There was also a political dimension: the Malay peasantry was the basis of UMNO's support and they had to be appeased if UMNO were to stay in power. The stage was set for a new policy initiative heralded by the riots of 1969. The NEP formulated in 1970 had to target the Malay peasantry and the east coast.

8 The 'compromise' between UMNO and MCA as political alliance in the 1930s was that the Malay should maintain the control of political system and special rights whereas the Chinese should be given free hand in the economy (Means, 1986:100-101).
Despite the heavy hand of intervention in the private sector, it also embraced a continued commitment to capitalism and export-orientation. Yet, the NEP and problems that foreshadowed it required a strategy to translate political objectives into social and economic realities. Where could such ideas be found?

2. ADOPTING THE RESOURCE-FRONTIER STRATEGY SINCE 1970

Towards the end of the 1960s, the needs of the UMNO-led government to restructure society were clear. They had to respond to a plan for ethnic and regional redistribution of resources, in particular for the peasants. With this end incorporated in the NEP, planners began to seek new means of facilitating Malays, in general, access to urban environments.

Coinciding with this search, the state of development theory at the time meant there was a ready-made solution — the growth centre concept. This encompassed a largely neo-classical model of growth (though dispensing with the crude laissez-faire prescriptions of the 1950s). By incorporating the growth centre concept within existing resource frontier programs such as FELDA, this new resource frontier strategy was specifically a measure for regional development. It called for the exploitation of Malaysia's largely untapped frontier land, yet it involved an urbanisation strategy. In short, though in different forms, this new resource frontier strategy had already been tested in South America.

But the crucial issue is: how did the resource frontier and growth centre concepts get to Malaysia; and how were they incorporated within existing planning and operational organisations?

South America to Southeast Asia: The Transfer of Ideas

As noted, Friedmann's resource frontier strategy had been applied in South America in the early 1960s. Friedmann, however, developed his ideas at that time in a climate generally sympathetic to neo-classical growth theory in belief of the trickle-down effects. By 1969, the approach had aroused increased concern of its distributional
effects. The emphasis solely on economic growth had led to widening gaps between rich and poor countries as well as between individuals. The appeal for a more just society resulted in a requestioning of the real objective of development (see Steers, 1969; Friedmann and Weaver, 1979). There was a general demand among many scholars who wanted to see a more equitable and redistributive system to be introduced within the capitalist society they themselves lived in (Meadows et al., 1972; Chenery et al., 1974). More critically perhaps, the ideals of the Chinese Cultural Revolution, Paris student riots and anti-Vietnam war campaigns of the late 1960s had major impacts on Western intellectuals in that the old ineffective development policies had to be changed. This thinking simultaneously influenced leaders of the developing countries, where they were often invited as advisers or participants in conferences on development issues.

In Malaysia itself, the NEP planners set out to tackle Malaysia’s problems of ethnic and spatial inequality. Determined to enhance the socio-economic status of the Malays, Tun Abdul Razak was influenced by the growth centre concept through foreign and local advisers in the Economic Planning Unit. This preeminent Unit of the Prime Minister’s Department had a tradition of inviting Western consultants to assist in formulating national policies. In 1970, through the Canadian International Development Agency came Benjamin Higgins, Ove Simonsen, Anthony Peters, K. E. Haynes, Rudy Rogalsky who worked together with local counterparts like Tong Yaw Hong, Ahmad Sidek and Lee Peng Chong, among others, for the Pahang Tenggara Development Project. In the early 1970s, there were large and semi-permanent teams of foreign development economists such as Warren Hunsburger, Donald Snodgrass and Jack Knecht from the Harvard Development Advisory Service – later known as Harvard Institute for International Development (Hansen, Higgins and Savio, 1988:304). In 1974, Lloyd Rodwin, a pioneer of Venezuela’s Guayana regional program of the early 1960s was also invited by the Malaysian government to devise a national urbanisation strategy (Rodwin, 1974). Back from abroad, many students of development studies (Kamal Salih, for instance) returning from universities of Western countries in the early 1970s had been influenced
by regional theories in vogue. They later became leaders in regional development planning.

Both foreign and Malaysian planners were basically versed in Western economic theory with devotion to capitalism but a new concern for distribution. They were prepared (or because of the jobs they had accepted or they were already in) to accommodate a direct role for the state in regulating economic and social change. Among those regional planners, they had almost the same basic knowledge of regional science and were familiar with the growth pole or growth centre concept (See Hansen, Higgins and Savoie, 1988:315-318; Higgins, 1988). Foreign advisers had more particular influence as they were seen by decision-making politicians as enjoying respected international status. Sometimes, their consulting service and experience cut across different continents. Benjamin Higgins and Lloyd Rodwin, for example, had worked in Brazil and Venezuela respectively in the 1960s using the growth pole concept to tackle problems of regional disparity. Thus, this concept became a convenient tool to use in the planning of Malaysia's frontier areas and as a means to decentralise industry and modern activities from more developed regions to underdeveloped regions. The ideas then, found a direct and effective route from the frontiers of Brazil and Venezuela to those of Pahang, Kelantan and elsewhere in Malaysia.

**Frontiers and Urbanisation: Adapting the Growth Centre Concept, 1971-85**

Despite the apparent suitability of the growth centre concept, some adaptation was necessary to mould it to the NEP. In particular, a key concern of the NEP for urbanisation was to develop a Malay urban middle class. Hence, in applying the concept on the resource frontiers, principally FELDA, some adaptation was required.

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9 My interviews with Higgins in the Australian National University in early 1989 confirmed the transfer of the growth pole concept to Malaysia. He clarified, however, that technical (physical, engineering and land use) considerations of the Pahang Tenggara consulting team far outweighed the application of economic theory.
The reliance on the growth centre concept was particularly important as Malaysia's politicians were concerned with cities. They saw urban centres as the hubs of modernisation – a rapid rate of Malay urbanisation not only would bring about social change but make the country's cities less marked by the image of 'colonial immigrant complex' (see Lim, 1978). Consequently, they hoped more centres with overlapping racial activities, trade and investment would emerge. Moreover, there was a counter-consideration. Their political support was located in the rural areas which were the 'periphery', dominated by peasant agriculture, and a disadvantaged hinterland in contrast with the urban core. Therefore, changing the inter-ethnic rural-urban and regional relationships became critical in the pressing need to develop a strong urban-based Malay middle class.

For these reasons, the original concept of frontier development programs had to be modified. Before 1970, FELDA's frontier development had provided settlers with public amenities in small settlements of 400 to 500 families (Mat, 1983:96). Despite the aim of planned development, overall planning was not integrated, leading to isolated, remote frontiers. The expansion of FELDA settlements was dependent primarily on the free play of market forces. There was little regional focus. The new resource frontier strategy now aimed at much larger settlements which, given the economies of scale, suited the need for a rural urbanisation strategy. Hence, Malaysia's resource frontier strategy was a product of state-sponsored large-scale commercial cropping as an economic base, incorporated with a growth centre concept to promote urban-led secondary and tertiary activities. The resource frontier strategy, however, remained part of a national urbanisation program within the NEP.

Under the New Economic Policy, the growth centre concept was applied at both urban and rural levels, and a variety of public institutions were created to help transform the traditional economy. Functions of some key institutions are described in Appendices 3.1A and 3.1B.
As the appendices show, there were PERNAS, UDA, MIDA, BIF and SEDC in the urban areas — all aiming to promote Malay involvement in urban commercial and industrial activities, acquisition of corporate shares, land and premises for subsequent resale to the Malays. Paralleling these in the rural sector, RISDA, LPN, Bank Pertanian (Agriculture Bank), LKIM, MARDEC and FOA were the main organisations. These institutions provide a wide-range of services: credit to padi farmers and guarantee of stable prices; assistance to smallholders in marketing their produce and provision of extension services; promotion of modern methods of fishing and others. Consequently, as argued in the Mid-Term Review of the Second Malaysia Plan (Government of Malaysia, 1973:14), the activities of these public institutions:

'are wide-ranging and comprise, inter alia, the development of modern activities in the rural areas, new growth centres and in existing urban centres. They have an important role in expanding opportunities for participation of Malays and other indigenous people in these sectors through financial, technical and other assistance to help them start and sustain their commercial ventures.'

Thus, the New Economic Policy used the growth centre concept for both existing major centres and new rural centres to promote Malay urban growth. Figure 3.1 shows how urbanisation was seen as an integral part of the NEP. There were two paths to transform the traditional Malay subsistence sector. The 'vertical' or 'urban' path would promote direct rural to urban migration, and thereby a closer involvement in the national and world market systems. Conversely, the 'horizontal' or 'rural' path was built on the development of modern cash cropping (mostly on the frontiers) by means of a rural growth centre strategy to activate rural urbanisation with the provision of government services and manufacturing enterprises. Again, such an economic base would need to develop strong links with existing urban areas and the world market. Thus, the 'horizontal' path drawing on the growth centre concept to induce non-agricultural activities on the frontier areas represented Malaysia’s new resource frontier strategy.
The resource frontier strategy was put into practice in the 1970s as part of Malaysia's decentralised urban policy. It had a strong regional development dimension with a focus on the balance between the east and west coasts. In the policy, Kuantan was selected to be the main development centre for the east coast states for reasons such as access by highway to Kuala Lumpur, a seaport and economic benefits from Pahang Tenggara development region and offshore petroleum (Government of Malaysia, 1974:Part III-16; 1976:209-214). Later under the Fourth Malaysia Plan (1981-85), in incorporating Rodwin's (1974) generalised national urbanisation strategy and Kamal Salih's (1975) 'rationalised growth centre strategy', the Economic Planning Unit conceived a more comprehensive urban structure for the whole Peninsular Malaysia, based on a 'development corridor concept'. A new regional development strategy was devised, giving rise to four differentiated major growth centres (Kuala Lumpur, Penang, Kuantan and Johor Baru). These major centres were designated to use the existing transport axis within their respective regions to lead other centres. They were preferably supported by secondary regional towns in the range of 40,000-75,000 (Government of Malaysia, 1981:183-84). Having discussed how the growth centre concept was
incorporated in Malaysia to facilitate urban growth, the examination of why new institutions were needed to promote the resource frontier strategy is now made.

3. INCORPORATING THE RESOURCE FRONTIER STRATEGY

Before 1970, there was no national regional planning machinery in Malaysia. Policies on regional development issues were made on an ad hoc basis between the Ministry concerned and individual state governments (Omar, 1978:70-71). All land development was operated on a project basis and conducted by individual agencies which were often manipulated by special interest groups or for particular political constituencies. Consequently, the projects were not integrated and wasteful because of duplication, administrative defects and unnecessary competition (Kuntom, 1967; Mat, 1983:74-76). Structurally, this poor coordination was vulnerable to malpractice. It had stemmed from two planes of action. On one level, sectoral decisions from the central government had not been adjusted well to the realities of field implementation. On another, there was a general lack of effort to bring together different sectoral projects to produce desired aggregative effects (UNCRD, 1977:23).

After 1970, having settled on a resource frontier strategy adapted to local situations, the need for a new organisation to incorporate it was even more strongly felt. But how could the activities of related government departments and agencies be coordinated? Thus, we need to examine the institutional options (existing or new) that faced Malaysia in the early 1970s and how their different activities could be regulated.

Using Existing Institutions?

Within regions in Malaysia, there were a series of development agencies or corporations — public, private and joint-venture. Some of these might have provided the organisational framework for the new resource frontier strategy. Private and joint-venture corporations, however, were excluded because they were business-oriented. Existing public agencies, on the other hand, had specific functions. For instance, FELDA's
primary task was to recruit settlers for resettlement and engage in cash crop production and other off-farm activities. As an institution specialised in agri-business, its daily operations were already very large (see Chapter 6 for more details). Though effective in managing agricultural enterprise, it had basically no experience in developing towns and new industries. None, if any, of its professional staff was trained in regional development planning. This was also the case for RISDA, FELCRA and other existing rural development institutions and government departments. The Ministry of Agriculture, however, had a traditional attachment to food crop projects and had little association with agencies involved in commercial cropping such as FELDA.

State governments were another alternative. Indeed in 1967, the Pahang state began the Jengka Triangle project\textsuperscript{10} – a first real attempt at the frontier resettlement. Nonetheless, their financial resources depended primarily on allocations from the Federal government. Restrictions resulting from the shortage of technical expertise and skills often arose, thus affecting their implementing capacity. More importantly, the Federal government was not ready to devolve power over the critical spatial redistribution issue of the NEP to the state governments. As post-1970 regional authorities were created to manage an increasingly large area to take advantage of the economies of scale, it became even more unlikely that the state governments could handle the task.

What was needed, therefore, was a new institution directly responsible to the Federal government which could plan, coordinate and implement national and regional policies by controlling the various programs within a planned region. There were antecedents – the Tennessee Valley Authority of the United States, the SUDAM and SUDENE of Brazil as well as the Guayana Development Corporation (CVG) of Venezuela. They served as prototypes for Malaysia to follow – evidence that Malaysia turned overseas for the institutional model for its resource frontier strategy. For Malaysia, such an institution could avoid the bureaucratic hindrance of District Offices.

\textsuperscript{10} JENGKA was transferred to the auspices of the Federal government in the early 1980s.
that a multi-district development program used to face. It had the advantage of reducing manipulations by interest groups and improving the coordination between different government departments in implementing projects (Omar, 1978). All lessons derived from the past experience had called for autonomous regional authorities. In 1972, Pahang Tenggara Development Authority (DARA) – the first federal regional agency – was established. Regional authorities had several features. They enjoyed certain administrative devolution in carrying out their operations. Administered directly by a federal ministry, it also received direct fund from the Treasury for their development projects. Although identified as semi-autonomous 'corporate' bodies, their prime role was to execute state policies within their respective regions as implementors, coordinators and planners. Currently, there are seven regional development authorities in Malaysia whose specific areas are shown in Table 3.2 and Figure 3.2. Among them, JENGKA, DARA, KEJORA, KETENGAH AND KESEDAR are resource frontier development authorities.

Table 3.2
Regional Development Authorities in Malaysia

<table>
<thead>
<tr>
<th>Authority</th>
<th>Year Created</th>
<th>Area (hectares)</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>JENGKA Triangle</td>
<td>1967</td>
<td>120,000</td>
<td>Pahang</td>
</tr>
<tr>
<td>DARA (Pahang Tenggara Development Authority)</td>
<td>1972</td>
<td>1,010,000</td>
<td>Pahang</td>
</tr>
<tr>
<td>KEJORA (Johor Tenggara Development Authority)</td>
<td>1973</td>
<td>304,000</td>
<td>Johor</td>
</tr>
<tr>
<td>KETENGAH (Trengganu Tengah Development Authority)</td>
<td>1973</td>
<td>440,000</td>
<td>Trengganu</td>
</tr>
<tr>
<td>KESEDAR (South Kelantan Development Authority)</td>
<td>1978</td>
<td>1,200,000</td>
<td>Kelantan</td>
</tr>
<tr>
<td>KEDA (Kedah Regional Development Authority)</td>
<td>1981</td>
<td>834,400</td>
<td>Kedah</td>
</tr>
<tr>
<td>PERDA (Penang Regional Development Authority)</td>
<td>1986</td>
<td>80,000</td>
<td>Penang</td>
</tr>
</tbody>
</table>

Source: Mat, 1983; Government of Malaysia, 1986a; fieldwork.
Figure 3.2

Distribution of Regional Development Authorities in Peninsular Malaysia

Source: Updated from Higgins, 1982:162.
Yet, given the large number of development authorities (each being guided by a master plan), ensuring that national macro-economic planning was consistent with regional planning within the country was also a high priority (Government of Malaysia, 1974:Part IV). Consequently in 1976, a new Ministry of Land and Regional Development was established to replace the Ministry of Land Development. Its new task included the monitoring of the regional development authorities, and their relations with FELDA, FELCRA and RISDA. Hence, the planning and guiding of development of new townships and growth centres in the frontier zones were ensured by the Ministry through its links with the regional development authorities.

From the above, we have seen how previous handicaps of coordination and implementation of regional projects had led to the formation of regional development authorities. They were, in turn, managed by a new Ministry of Land and Regional Development to ensure national policies were implemented on the regional level. The adoption of these two levels of institutions provided the organisational framework for implementing the resource frontier strategy throughout Malaysia. In theory, such a structure provided special planning functions, assured coordination between Federal and state bodies and overcome the fragmentation of effort, conflict of objectives and overlap of daily tasks. How this planning and implementation worked in practice is the subject of the next chapter.

Resume

This chapter has examined how Malaysia adopted a resource frontier strategy. The post-war Malayan Union crisis and the 'Emergency' had strengthened the ethnic-oriented position of UMNO. As an inseparable ally of the Malay peasants, UMNO helped to provide a series of measures to relieve their persistent problems of poverty as part of the national pursuit for economic growth. Yet, the neo-classical approach did little to reduce the inter-ethnic gaps in economic terms at the eve of the racial disturbance of 1969.
Since 1970, the government has launched a rigorously interventionist NEP to intensify development programs by creating numerous institutions to promote Malay interests, aimed at creating a strong Malay entrepreneurial class. This new development ideology saw the poverty issue as having strong ethnic, urban and regional implications given that the poor Malay households were most concentrated in the less urbanised states of Kelantan, Trengganu, Kedah and Perlis – states characterised by the general lack of access to urban services and opportunities. Consequently, the growth centre concept was adopted at the national level to help Malay urbanisation and involvement in industries. In the frontier development programs, notably FELDA, the growth centre concept was integrated for the same objective. With this background, the resource frontier strategy was born.

But the resource frontier strategy needed a central institution to plan, coordinate and implement at the regional level. Past experiences had indicated that existing project-oriented agencies were inappropriate to assume such a task. Consequently, a series of regional development authorities were established and were managed, since 1976, by a new Ministry of Land and Regional Development. Chapter 4 will focus on how regional development authorities implement the resource frontier strategy.
PART II

LIVING ON THE MALAYSIAN FRONTIERS
CHAPTER 4

REGIONAL PLANNING PRACTICE ON
THE MALAYSIAN FRONTIERS

The resource frontier strategy in Malaysia is implemented through its broad regional development policies and institutions. Thus, there is a need to investigate how planners\(^1\) in the regional development authorities translate federal policies into action. As it is not possible to examine the conduct of all regional planners throughout Malaysia, attention is focused on two planned regions – Pahang Tenggara and Kesedar (Figure 4.1). Within the prescribed legislative framework, the regional planner’s function is to ensure that targets incorporated in regional master plans are met. Targets are set in Kuala Lumpur. They are updated by directives from the same location. The planner’s task, therefore, is to ascertain that these fiats are followed in implementing specific projects. This involves the regional planner in liaising with different federal and state government departments and private developers to ensure that the principles of the master plan are met in project development. Consequently, the regional planner is involved in meetings in Kuala Lumpur to provide feedback to federal colleagues, in meetings in state capitals for project discussions, and in writing periodic reports. This operational framework raises the critical issue: how effectively do the regional planners implement the resource frontier strategy and the set targets?

Before determining the effectiveness of planners in the implementation process, we need to discuss briefly the background of the two regions selected for study. Once this is done, we can proceed to examine the role of planners and the degree of autonomy they possess in implementing regional policies. Within this narrowed focus we can ask the

\(^1\) We entitle the General Managers of the regional development authority as 'regional planners' because of their direct responsibility in the daily operations of the corporation. To an extent, we agree with Johari Mat’s (1983:122) argument that their 'personality, dynamism [and] efficiency' has influence on the performance of the authorities.
Figure 4.1: Pahang Tenggara and Kesedar Regions and Their Planned Settlement Patterns

Source: Fieldwork.
basic question: how do the regional planners in Pahang Tenggara Development Authority and South Kelantan Development Authority (KESEDAR) differ from each other?

In analysing the variations between the two regions, we begin by examining general features of Pahang Tenggara and Kesedar, followed by an overview of the framework within which they operate (section 1). Subsequently, we study the conduct of the planners of the two regions based on field interviews and an analysis of their weekly schedule (section 2). We are then in a position to evaluate and account for their performance in meeting the master plan targets established by the federal government (section 3).

1. PLANNING STRUCTURE: AN ORGANISATIONAL STRAITJACKET

The actions of the regional planners throughout Malaysia are circumscribed by the federal Ministry of Land and Regional Development. Hence, we have to examine the hierarchical organisational framework of planning to gauge the degree of autonomy enjoyed by regional development authorities. A general picture of Pahang Tenggara and Kesedar, however, should be provided before the task of regional planners is tackled.

General Background of Pahang Tenggara and Kesedar

Of the seven regional development authorities, Pahang Tenggara and Kesedar\(^2\) are the largest in terms of size. More importantly, both regions are located on the east coast where economic activities have been lagging behind the more prosperous west coast. Under the New Economic Policy, they have a presumed role of counterbalancing the longstanding dominance of the west coast in modern activities. Situated at the southeastern part of Pahang, Pahang Tenggara covers one-third of the state area. Virtually all jungle, it had 56,000 people (mostly living on the coast) in 1972 when the authority was created by the Parliament Act No. 68. Conversely, Kesedar is situated to

\(^{2}\) Throughout the thesis, 'Pahang Tenggara' (also known as Dara) is used to mean the region managed by the Pahang Tenggara Development Authority and 'Kesedar' (also called Kelantan Selatan) for the region administered by the South Kelantan Development Authority.
the south of the more established north of Kelantan. Though occupying three-quarters of the state and larger than Pahang Tenggara by 20 per cent, Kesedar has less potential than the latter in agriculture because of its hilly terrain — more than half of the region is under forest reserve and National Park (Taman Negara). Pahang Tenggara, however, is relatively flat — more than 70 per cent being suitable for agriculture. Some of the swamps in low lying areas, moreover, can be used for annual crops if adequately drained or irrigated. Though established later in 1978 by the Parliament Act No. 203, Kesedar had a population of more than 100,000 by that year — consisting largely of land-seeking peasants from North Kelantan. It was not an entirely virgin frontier: between the late 1950s and 1978, twenty-five schemes had been developed by the Kelantan State Development Board for smallholders. It had also been bolstered by the timber industry, based on which two frontier towns (Kuala Krai and Gua Musang) had emerged before the war. Despite differences between Pahang Tenggara and Kesedar, their relative 'emptiness' presented opportunities in the 1970s and attracted the attention of the national government and the planners. Consequently, both were assigned with the 'mission' of the resource frontier strategy.

As frontier regions established by the central government, Pahang Tenggara and Kesedar have the same terms of reference but they are guided by two different regional development plans. Recruiting policy for settlers varies. For instance, the severity of landlessness in North Kelantan has restricted Kesedar participants from Kelantan only. In contrast, Pahang Tenggara absorbs settlers from all over Peninsular Malaysia, although residents of Pahang are given priority. Given their contrasting physical and socio-economic features, they differ also in methods of implementation. Nonetheless, they are subject to an identical degree of control from the central government which, under the Malaysian Constitution, is the sole authority for development budgetary control. Thus, we need to examine how the hierarchy of national planning and decision-making determines the operation of frontier regional planning.
Planning and Decision-Making

Within Malaysia's highly centralised developing planning framework, the input of regional development authorities to national policies is small as they are located far from the planning core (Figure 4.2). National developing planning is carried out or adjusted through successive five-year plans. Development targets of each regional development authority are set or readjusted in these plans. In preparing the plan, there are two tiers of agencies responsible for planning and coordination. At the federal level, planning is undertaken by central agencies located within the Prime Minister's Department – the Economic Planning Unit, the Socio-Economic Research Unit, the Implementation and Coordination Unit (ICU), the Public Services Department (PSD) and, the Malaysian Administrative Modernisation and Manpower Planning Unit (MAMPU). There are also contributions from the Treasury, Bank Negara (Central Bank) and other planning units in various ministries.

The Economic Planning Unit is the main coordination body and is assisted by two other agencies in data collection: (a) the Implementation and Coordination Unit (ICU) at the national and inter-departmental levels; and (b) the Inter-agency Planning Groups (IAPGs) responsible for coordination between central agencies. Having assembled proposals including those from the state governments and processed them, the Economic Planning Unit is in the position to present preliminary development plans to the National Development Planning Committee (NDPC). The NDPC formulates, implements, evaluates progress and revises, where necessary, the development proposals with the secretariat service provided by the Economic Planning Unit. These proposals are submitted to the National Economic Council (NEC) for further action. Chaired by the Prime Minister and comprising key cabinet members, the National Economic Council reviews the proposals and ensures that all development targets are in accord with national targets.

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3 MAMPU coordinates manpower planning with the Public Services Department which provides staff and INTAN (National Institute of Public Administration) which undertakes training courses for staff at national and regional levels. Further, MAMPU's main task is to search new management techniques and innovations to make the public service more efficient and effective.
Figure 4. 2

National Planning and Coordination in Malaysia

Parliam't → Cabinet → NEC → NFC

PSCC → NDPC → IAPG → BN → TR

MAMPU + SERU + PSD → EPU → ICU → SDO → SLA

Federal Level

Ministry

State Level

RDA → SEPU

Source: Adapted from Government of Malaysia, 1971b; 1976; 1981 and fieldwork data.
goals and political objectives. Any financial-proposals have also to be scrutinised by the Treasury which submits subsequently the documents to the National Financial Council for approval before being delivered to the Parliament. After amendment and endorsement by the Parliament the formal procedure is for the Prime Minister to instruct the Minister of Land and Regional Development to undertake development projects that meet annual targets.

The second-tier of planning rests with the state level – a mere supportive process for federal planning and decision-making. All state development proposals have to be first scrutinised by the Ministry of Land and Regional Development and the Economic Planning Unit. Before submission, the State Economic Planning Units (SEPU), directly assisted by its State Development Offices (SDO), formulate development strategies and coordinate projects and programs. The Menteri Besar (Chief Minister) is the chairman of the State Economic Planning Unit and the State Legislative Assembly. A politician, his main task is to ensure that the proposals correspond with the prevailing national policies. In preparing regional programs, the State Economic Planning Unit also liaises with district offices, local authorities and regional development authorities within its own state (Husin, 1981).

Once all required information from both federal and state levels has been marshalled for the National Development Planning Committee, the latter is in the position to take into account the views of the Private Sector Consultative Committee (PSCC) on the prevailing investment climate and environment. Thus, the regional development authorities are only required to provide five-year development proposals related to their areas through the Ministry of Land and Regional Development and to the State Economic Planning Unit, including township development on the resource frontiers.

Consequently, macro regional programs and decision-making are all determined at the federal level and are the prerogatives of the central government. The regional planners (or General Managers), as in Pahang Tenggara or Kesedar, have little input into planning
and decision-making. At best, their contributions are restricted to views expressed in the respective regional authority's annual and quarterly reports which are sent to the Minister of Land and Regional Development (who is normally a politician). Moreover, the regional planners can also make their suggestions to the Minister with whom they meet monthly in the Ministry's headquarters in Kuala Lumpur. In turn, the Minister may make use of these materials in his contributions to deliberations in the National Development Planning Committee (NDPC) – a super-ministerial body made up of head figures of major economic development ministries.

On receiving development targets assigned by the Parliament each year, the Minister of Land and Regional Development will direct the Regional Board of Directors (comprising federal and state representatives and professionals) to ensure that these annual targets are met within individual regions. Appointed by the Board (subject to ministerial approval), the planner's role is to implement the projects. Although members of their respective Boards, the planners have no right to vote in the Board meeting and they can be removed from office at the Minister's will without any reasons being specified. Consequently, planners in Pahang Tenggara and Kesedar (and elsewhere in Malaysia) have to be conscious of the Minister's political goals and objectives in performing their allotted task.

Hence, regional planning in Malaysia is strongly centralised. National planning and political priorities are exercised through the heavy control of the federal government, the Economic Planning Unit and the Ministry of Land and Regional Development. They control the planning process and thus determine how the resource frontier strategy is put into action. Directives and targets are from the centre and there is virtually no scope for those at the regional level to influence the overall objectives and methods. Yet, it is at the regional level where regional programs are implemented. How crucial and effective has the role of the regional planners been?
2. CONDUCT: ROOM TO MANOEUVRE

Regional planners in Pahang Tenggara and Kesedar may have little real say in planning and decision-making, but they have an important role as facilitators of central government policy. Initially, their position is spelt out in general terms before an examination is made of specific projects in the regions under study.

Implementation

The regional planners of the regional authority receive their directives from the Minister through the Board of Directors. Specifically, planners in Pahang Tenggara (Dara, 1972c:6) and South Kelantan (Kesedar, 1978:6) are charged with promoting, stimulating, facilitating and undertaking economic and social development within their respective regions. In carrying out these tasks the regional planners have to act as: (a) initiators of feasibility studies; (b) agents promoting and coordinating industrial and commercial activities on behalf of the federal and state governments; and (c) lenders of federal money to assist persons, companies and public authorities in approved industrial and commercial activities. As shown in Figure 4.3, the planners have to liaise with the state authorities in Pahang and Kelantan that are based in Kuantan and Kota Baru respectively. They also receive feedback from administrative and operational divisions under their direct control.

The key function of the regional planners in Pahang Tenggara and Kesedar, however, is to oversee the construction of infrastructure projects specified in the plans handed down through the Board of Directors (Figure 4.3) – the aim being to meet the planned targets set for their respective domains. These projects range from civil engineering activities (roads, water supply, electricity and communications) to architectural developments (houses, schools, shoplots, clinics, mosques and recreations facilities). Basically, there are three types of projects in both regions of Pahang Tenggara and Kesedar: public ventures initiated and paid for by the federal or state government;
private ventures sponsored by individuals and corporations; and joint-ventures involving either public-private partnerships or federal-state collaboration.

Figure 4.3: Project Implementation by Regional Planners

Source: Fieldwork.

With more room to manoeuvre in their operational activities, the regional planners in Pahang Tenggara and Kesedar have developed different implementation structures. As shown in Figure 4.4, the regional planner’s activities in Pahang Tenggara are implemented through nine divisions - four administrative, four developmental and one coordinating and monitoring. Although Kesedar has also nine divisions, five are operational, one administrative and three financial and planning. The functions of these different divisions in Pahang Tenggara and Kesedar are specified in Table 4.1A and Table 4.1B respectively. As can be observed from these two tables, the development focus of Pahang Tenggara is significantly different from that of Kesedar, despite the fact
Figure 4.4: Organisational Chart of Pahang Tenggara and Kesedar

A. PAHANG TENGGARA

REGIONAL PLANNER

Deputy General Manager (Administrative)

Deputy General Manager (Development)

Administration and Finance
Land Administration
Local Government
Manpower and Training
Coordination and Monitoring
Planning and Education
Technical Services
Investment and Promotions
Housing Implementation

B. KESEDAR

REGIONAL PLANNER

Deputy General Manager (Operational)

Internal Audit Unit

Deputy General Manager (Finance & Planning)

Land Rehabilitation
Land Development and Placement of Settlers
Local Government and Development of Traditional Villages
Public Works Unit
Social Development
Administration and Training
Finance and Budgeting
Planning and Evaluation
Special Planning Unit (Kesedar)

Note: General Manager has been replaced here as Regional Planner.

<table>
<thead>
<tr>
<th>DIVISION</th>
<th>FUNCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td></td>
</tr>
<tr>
<td>Administration and Finance</td>
<td>Office administration, secretarial service, personnel management, library;</td>
</tr>
<tr>
<td></td>
<td>finance, purchase and stocking, accounts and budgeting.</td>
</tr>
<tr>
<td>Land Administration</td>
<td>Processing of land applications (agricultural, township or mining), land</td>
</tr>
<tr>
<td></td>
<td>acquisition, transaction, reserves, forest clearance.</td>
</tr>
<tr>
<td>Local Government</td>
<td>Planning and building control, town administration and maintenance,</td>
</tr>
<tr>
<td></td>
<td>recreational facilities, health control, property management.</td>
</tr>
<tr>
<td>Manpower and Training</td>
<td>Manpower recruitment and training, community and entrepreneurship</td>
</tr>
<tr>
<td></td>
<td>development, agricultural extension service.</td>
</tr>
<tr>
<td>Development</td>
<td></td>
</tr>
<tr>
<td>Planning and Education</td>
<td>Town and regional planning including population projection, need of</td>
</tr>
<tr>
<td></td>
<td>housing, commercial premises and transport; study of Orang Asli and</td>
</tr>
<tr>
<td></td>
<td>traditional kampung.</td>
</tr>
<tr>
<td>Technical Services</td>
<td>Engineering design, contract management, temporary water and electricity</td>
</tr>
<tr>
<td></td>
<td>supplies, vehicle maintenance and construction supervision.</td>
</tr>
<tr>
<td>Investment and Promotions</td>
<td>Project identification and promotion, township construction; establishment</td>
</tr>
<tr>
<td></td>
<td>of companies and monitoring their progress; industrial development.</td>
</tr>
<tr>
<td>Housing Implementation</td>
<td>Implementation of building projects, loan and contract management for</td>
</tr>
<tr>
<td></td>
<td>housing and commercial projects.</td>
</tr>
<tr>
<td>Coordination and Monitoring</td>
<td>Directly managed by the General Manager in Masterplan implementation and</td>
</tr>
<tr>
<td></td>
<td>monitoring, program coordination, budget and loan control, public relations</td>
</tr>
<tr>
<td></td>
<td>and reporting.</td>
</tr>
</tbody>
</table>

Source: Dam, 1985:151-152.
Table 4.1B

Functions of Various Divisions of South Kelantan Development Authority (KESEDAR)

<table>
<thead>
<tr>
<th>DIVISION</th>
<th>FUNCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
<td></td>
</tr>
<tr>
<td>Land Rehabilitation</td>
<td>Rehabilitates 25 land development schemes (7,280 smallholders), since 1983, undertaken earlier by Kelantan State Land Development and Rehabilitation Board; provides infrastructure and raises productivity.</td>
</tr>
<tr>
<td>Land Development and Placement of Settlers</td>
<td>Organises settlers to use a la Kelantan approach and undertakes also land clearing, planting, maintenance of crops; constructs settlement and infrastructure for its own schemes.</td>
</tr>
<tr>
<td>Local Government and Development of Traditional Villages</td>
<td>Rehabilitates 200 traditional villages threatened by floods, guerillas and wild animals; provides administrative services and identifies suitable areas for development.</td>
</tr>
<tr>
<td>Public Works Unit</td>
<td>Provides infrastructure and technical services (road, bridge, school, clinic, staff office and residence, water and electricity supplies and maintenance).</td>
</tr>
<tr>
<td>Social Development</td>
<td>Creates a self-reliant community; helps promote subsidiary jobs, solves settlers' problems and trains residents in various social aspects (religion, education, sports and welfare, leadership training).</td>
</tr>
<tr>
<td>Finance and Planning</td>
<td></td>
</tr>
<tr>
<td>Finance and Budgeting</td>
<td>General finance control, accounting and budgeting, financial reporting.</td>
</tr>
<tr>
<td>Planning and Evaluation</td>
<td>Plans and coordinates for development of settlements, traditional villages and agriculture; promotes investment and local entrepreneurship.</td>
</tr>
<tr>
<td>Special Planning Unit (Kesedar)</td>
<td>Prepares physical plans for development area or sites in collaboration with Federal Town and Country Planning Department.</td>
</tr>
<tr>
<td>Administration and Training</td>
<td>Directly under the General Manager to improve and train the staff's skill in management, administration and secretarial service; personnel management; allocation of annual budget; office administration and library.</td>
</tr>
</tbody>
</table>

Source: Field Data from Kesedar Headquarters, Gua Musang.
that both authorities have identical terms of reference clearly stated in the Acts of Parliament creating them. Hence, why are their organisational structures different?

These differences reflect the specific needs of each region. Pahang Tenggara has been developed virtually from jungle and has now evolved to the stage where the regional planner's task is to attract industrial and commercial development by identifying projects to be developed by the investing government agencies and private companies. Conversely, Kesedar has inherited a large number of land schemes developed earlier by the Kelantan state government. Most of these schemes run by smallholders now need rehabilitation to raise land productivity and income. Hence in Pahang Tenggara, there are divisions for Investment and Promotions, and Housing Implementation whereas in Kesedar there are Land Rehabilitation and Traditional Village Divisions. Further differences stem from the fact that although Pahang Tenggara makes direct investment in cash crops, it does not recruit settlers. Daily tasks within its plantations are carried out by labourers. Kesedar, however, has a Land Development Division to run its own land schemes and to take in settlers for permanent resettlement. While Pahang Tenggara's Coordination Division liaises with the Public Works Department to implement and maintain specific physical infrastructure works, Kesedar has a Public Works Unit set up within its authority for the same purpose. Even the Local Government serves different functions in each region. In Pahang Tenggara, the Local Government is involved in township administration, maintenance and property management. In contrast, Kesedar's Local Government is more concerned with rehabilitating the 200 'traditional villages' threatened frequently by natural hazards. It also identifies areas for local development projects.

Other contrasts stem from the divergent ways of funding the two regional authorities: Pahang Tenggara receives its funds directly from the Treasury whereas finances for Kesedar are funnelled through the Kelantan state government. These differences between the organisational structures used by the regional planners in Pahang Tenggara and Kesedar are also reflected in their detailed activities.
Weekly Work Schedules

As a means of drawing out the differences between the two regional planners and their respective areas, attention is focused on their weekly work schedules. Although there is considerable variation in their weekly activities it is appropriate for our purpose to discuss a 'typical' week in the lives of the regional planners in Pahang Tenggara and Kesedar.

Basically, as shown in Table 4.2, the regional planners in Pahang Tenggara and Kesedar organise their weekly schedule to meet the directives from the Secretary-General of the Ministry of Land and Regional Development or from other central agencies based in Kuala Lumpur. Normally, the regional planner in Pahang Tenggara may spend the first day of the week giving advice to potential investors whereas the Kesedar counterpart is engaged in checking a feasibility report for submission to the Board of Directors. The second day of the week in Pahang Tenggara can be spent formulating an 'action program' for subsequent discussion with the Board of Directors whereas the regional planner in Kesedar has a regular meeting with the state's Chief Minister in Kota Baru to discuss joint federal-state ventures. While the regional planner in Pahang Tenggara is still engaged in formulating an 'action program' on the third day of the week, his colleague in Kesedar has meetings with heads of his operational divisions to discuss progress on nominated projects.

Typically, the fourth day of the week in Pahang Tenggara is spent by the regional planner on checking financial and project reports prepared within the main office. The regional planner in Kesedar, however, attends official openings and ceremonial celebrations before returning to the office. The regional planner in Pahang Tenggara devotes the fifth day of the week to visiting particular townships and checking on construction while his counterpart in Kesedar meets district visitors to discuss local government affairs. The last day of the week is spent by Pahang Tenggara's general manager on routine paperwork while his equivalent's time in Kesedar is spent checking reports and discussing specific issues with the staff concerned.
Table 4.2

A 'Typical' Weekly Schedule for Regional Planner in Pahang Tenggara and Kesedar

<table>
<thead>
<tr>
<th>Pahang Tenggara</th>
<th>Kesedar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Meet potential investors and give advice</td>
</tr>
<tr>
<td>Day 2</td>
<td>Development of 'Action Program' for subsequent comment by Board of Directors</td>
</tr>
<tr>
<td>Day 3</td>
<td>As day 2</td>
</tr>
<tr>
<td>Day 4</td>
<td>Check financial and project reports prepared by assistants in office</td>
</tr>
<tr>
<td>Day 5</td>
<td>Visit to a township to check progress of construction</td>
</tr>
<tr>
<td>Day 6</td>
<td>Some routine paperwork</td>
</tr>
</tbody>
</table>

Source: Fieldwork interviews.

This 'typical' weekly schedule of the regional planners in Pahang Tenggara and Kesedar have to accommodate events that have fortnightly, monthly and annual rhythms. In Pahang Tenggara, for instance, meetings between the regional planner and divisional heads (some or all) are arranged on a fortnightly basis; their purpose is to assign projects to divisions and discuss the progress of implementing nominated projects (e.g. shoplot construction to the Housing Implementation Division). Conversely, in Kesedar monthly meetings are arranged with divisional heads to examine fresh instructions from the Board of Directors and progress on projects; these meetings may result in remedial action. Both planners have to arrange annual meetings which report implementation and discuss the budget for the next financial year. Apart from this isolated instance, the regional planners in Pahang Tenggara and Kesedar have diverged in scheduling their activities. These divergences stem from the fact that Pahang Tenggara and Kesedar are very different places as borne out by an examination of case studies located in their respective domains.
Case Studies: Bandar Tun Razak and Paloh 1

In highlighting the differences in the activities of regional planners in Pahang Tenggara and Kesedar, we contrast their role in two settlements: Bandar Tun Razak in Pahang Tenggara and Paloh 1 in Kesedar (Figure 4.5).

Bandar Tun Razak is the largest township within Pahang Tenggara, with 21,600 residents of whom 17,200 are FELDA settlers. The FELDA settlers live in five settlements (Keratong 1 to Keratong 5) of the township which has a central zone managed by the Pahang Tenggara Development Authority. The physical design of the township is a good example of Pahang Tenggara's aim of 'rural urbanisation' through large settlements. Paloh 1, however, is relatively small, having only about 1,000 residents, none of whom are associated with FELDA. Bandar Tun Razak has the largest oil palm 'hinterland' in the region measuring some 12,000 hectares whereas Paloh 1 serves merely an area of 1,720 hectares. Having been invested with substantial capital in infrastructure since the 1970s, Bandar Tun Razak has now piped water and 24 hour electricity supplies while settlers in Paloh 1 still had to depend on well water and lamps (as observed at the time of survey in February 1988). As shown in Figure 4.6, the regional planner in Pahang Tenggara is using the Local Government Division to manage the Bandar Tun Razak project.

Conversely as in Kesedar, the regional planner has given responsibility for Paloh 1 to the Land Development and Placement of Settlers' Division. The decision to allocate the task to the Local Government Division in Pahang Tenggara reflects its prime task of ensuring the creation of an urban and industrial environment to accommodate non-agricultural settlers within the township. In contrast, the Land Development and Placement of Settlers Division in Kesedar is not only engaged in land development but is responsible for building settlers' houses. Reflecting these differences, the regional planner in Pahang Tenggara has designated the project manager 'Administration Officer' but 'Scheme Manager' is preferred by the Kesedar-based colleague.
Figure 4.5: Two Settlements: Bandar Tun Razak and Paloh 1

Source: Fieldwork.

Not to scale
As manager of Bandar Tun Razak, the regional planner has delegated the Administration Officer to coordinate constructions within the designated township (technical services, tender documents and building inspection are provided by the regional planner's other divisions). The regional planner's Scheme Manager in Paloh 1 has a less onerous task as there is still no town centre and little infrastructure for services (only a few grocery shops were in existence during fieldwork in February 1988). As Bandar Tun Razak is a FELDA area, the regional planner is responsible for the commercial and industrial centre (including the provision of public services, staff houses and shoplots) as well as to coordinate with the Public Works Department over road construction and maintenance. In Paloh 1, the regional planner is responsible for all these activities. While FELDA also undertakes housing construction for its settlers and staff in
Bandar Tun Razak, the settlers in Paloh 1 undertake these activities themselves a la Kelantan under the supervision of the regional planner (under the a la Kelantan approach, groups of settlers tender for the housing contract and share profits).

There is, however, considerable devolution of the powers possessed by regional planners to their field officers in Bandar Tun Razak and Paloh 1. In Bandar Tun Razak, for instance, the Administration Officer is in charge of township administration, community development, youth and women's organisations and the health inspectorate. Once the houses are completed in Paloh 1 the Scheme Manager's main task will be to manage the oil palm plantation with the help of ten field supervisors; the provision of general services, however, is provided by the regional planner's Public Works Division.

Although both regional planners delegate power to field officers, the Administrative Officer in Bandar Tun Razak has to report to his respective divisional heads on a fortnightly basis and the Scheme Officer in Paloh 1 on a monthly basis. In turn, the respective divisional heads channel requests on physical and social needs to the regional planners. Although the reporting structures for Bandar Tun Razak and Paloh 1 are remarkably similar they do not mask the real distinctions between the two projects. They reflect, however, the more fundamental differences between Pahang Tenggara and Kesedar and their regional planners.

In part, these differences in the actions of the regional planners reflect the history of Pahang Tenggara and Kesedar. Since 1972, the former has built seventeen townships. Conversely, the latter has constructed only nine small settlements since its inception in 1978. As Pahang Tenggara, therefore, is well-established the regional planner's task is more concentrated in the headquarters of the authority in Muadzam Shah though frequent visits are made to regional townships, Kuantan and Kuala Lumpur. In sharp contrast, Kesedar is a more recent phenomenon and much of the planner's attention is focused on embryonic projects (often areas in need of rehabilitation). Further, all land schemes in Pahang Tenggara are being undertaken by FELDA and private developers or under joint-ventures whereas some land schemes are being carried out by the regional planning
authority of Kesedar. Both planners in Pahang Tenggara and Kesedar are busy attending meetings. The regional planner in Kesedar has to chair three subsidiary development corporations; the latter, given the strong federal-state connection, has also to participate in Kelantan's Kota Baru-based Forestry and Natural Resources Committee and State Action Committee (both chaired by the state's Chief Minister). Compared to Pahang Tenggara, the regional planner in Kesedar has to delegate more of his activities to an assistant to ensure that maximum attention is devoted to the desire of leading politicians at both the federal and local level to foster the economic and social development of Kelantan. Bearing these differences between Pahang Tenggara and Kelantan in mind we proceed to the more difficult task of assessing the performance of their respective planners.

3. PERFORMANCE: PROBLEMS OF ASSESSMENT

Assessments of the performance of the regional planners in Pahang Tenggara and Kesedar are difficult to make. As we have seen, their task is to manage funds derived from the federal Treasury after approval by the Parliament or State Legislative Assembly (and, in the case of Kesedar funds are channelled through the state government). Other financial resources are derived from federal or state loans, private projects and money borrowed with the Minister of Land and Regional Development's approval. The planners are permitted, as shown in Figure 4.7, to use these funds to create reserves, set up new corporations, repay loans, grant loans, make other investments and pay their staff. While they have similar obligations in accounting to their superiors they have more flexibility in choosing the method of investment. Although their devotion to meeting the demands of their superiors can be gauged to some extent through an examination of official records, there are no formal channels measuring the effects of their activities on people living within their respective domains.
General Impact

Measurements of the performance of regional planners in Pahang Tenggara and Kesedar are confined to a narrow range of activities within the five year planning framework. Basically, the Minister of Land and Regional Development issues two main directives: the first concerns capital assets and the second demands specific information to be submitted in quarterly, annual or occasional reports. As shown in Figure 4.8, the regional planners have to prepare four types of reports in response to these requests: the first is a routine report giving accounts of the use of property, assets and activities; the second are special reports to meet the Minister's ad hoc requests; the third comprises the quarterly and annual reports on detailed development within the respective regions; and the fourth report concerns the annual budget estimate to be submitted in September of each year. All reports are delivered to the state government and, if directed by the Minister, to other public authorities or individuals.
Besides these paper assessments of their performance the planners in Pahang Tenggara and Kesedar have to attend ministerial meetings. They are required to attend monthly meeting at the Ministry's headquarters in Kuala Lumpur with regional planners from throughout Malaysia. The Minister and senior bureaucrats in the Ministry are present. Occasionally, ad hoc meetings are called by the Secretary-General of the Ministry to discuss specific issues, such as budget constraints for the ensuing year and variations in rent for shophouses to encourage commercial development in particular regions.

During the Minister's regular meetings any major propositions are minuted and circulated afterward. Follow-up actions in Pahang Tenggara and Kesedar, for instance,
will be pursued by their respective planners. Frequently, quarterly and annual reports are used by the planners to report progress on specific requests. They may also report progress in person at a subsequent monthly meeting. Clearly, this system provides the Minister with an effective way of monitoring the performance of the regional planners in Pahang Tenggara and Kesedar. The formal channels for assessing the performance of the regional planners in Pahang Tenggara and Kesedar are rather general and abstract. A more concrete means of determining their performance is to examine township development and project investments.

**Township Development**

The regional planners in Pahang Tenggara and Kesedar are charged with implementing township development as part of their respective development plans—a reflection, in turn, of the federal government's emphasis on urbanising the rural poor (especially the Malays) as part of the New Economic Policy brought down in 1971. Both regional planners have targets set for them for township development and we can use these to provide a specific performance yardstick.

The targets for township development in Pahang Tenggara were incorporated in the master plan drafted in 1972 as part of the New Economic Policy's aim of providing opportunities by shifting residents from agricultural into managerial, commercial, industrial and financial activities in frontier regions. There was no master plan as such, however, to guide the regional planner in Kesedar; the targets on township development have, therefore, to be derived from the Indicative Regional Plan released in 1984. Both plans, however, were infused with the standard regional planning doctrine. The thrust of the Pahang Tenggara Master Plan was to transform the agricultural and resource-based region into a spatially modernised zone where non-agricultural jobs were to be created through ‘multiplier effects’ and concentrated in the new townships (Dara, 1972a:2-3). Similar sentiments pervaded Kesedar’s Indicative Regional Plan (see Kesedar, 1984) as a combined growth centre and central place strategy was seen as the key to township
development - the aim being to aggregate population to provide the threshold for higher levels of services.

The Pahang Tenggara Master Plan proposed to build 86,000 residential units in thirty-six new townships by 1990 to accommodate about 450,000 people of whom a large proportion would be employed in secondary and tertiary activities - a nine-fold increase from the 56,000 people resident there in 1970 (Table 4.3); the designated centre, Muadzam Shah was to have a population of 40,000 in 1990. In contrast, Kesedal's Indicative Regional Plan proposed to develop seven major townships (Gua Musang, Jeti, Manek Krai, Kemubu, Dabong, Bertam and Ciku) from their 5,000 population in 1970 to 54,000 in 1990. These targets will not be reached in time based on present progress (more details will be given in Chapter 7).

Table 4.3

Projected Population for Pahang Tenggara and Kesedal

<table>
<thead>
<tr>
<th>Year</th>
<th>Township</th>
<th>Pahang Tenggara Urban</th>
<th>Kesedal Rural</th>
<th>Kesedal Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>55,800</td>
<td>5,119</td>
<td>90,300</td>
<td>95,419</td>
</tr>
<tr>
<td>1980</td>
<td>291,500</td>
<td>18,254</td>
<td>127,699</td>
<td>145,953</td>
</tr>
<tr>
<td>1990</td>
<td>448,780</td>
<td>53,620</td>
<td>236,371</td>
<td>289,991</td>
</tr>
</tbody>
</table>

Source: Data, 1972a:34 and 49; Kesedal, 1984:8.

More information is available on townships in Pahang Tenggara than Kesedal. Of the planned thirty-six townships in the former, seventeen have been completed; details on housing construction are available for twelve of the townships. This shows that the regional planner in Pahang Tenggara has overseen the construction of 2,118 houses. As shown in Table 4.4, the rate of occupancy, however, varies markedly between settlements. All houses in Bera, Cini and Bandar Tun Razak have been occupied; Muadzam Shah also has a near-perfect record. There are, however, marked vacancies in the other settlements - the worst case being Kota Shahbandar where only 39 of the 195
dwellings are occupied. Not surprisingly, the Minister of Land and Regional Development has called a halt to further township development in Pahang Tenggara in 1985.

Table 4.4
Occupancy Rate for Houses Built by Pahang Tenggara Regional Authority

<table>
<thead>
<tr>
<th>Township</th>
<th>Occupied No.</th>
<th>%</th>
<th>Vacant No.</th>
<th>%</th>
<th>Completed No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felda Scheme</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bera</td>
<td>50</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
<td>50</td>
<td>100.0</td>
</tr>
<tr>
<td>Cini</td>
<td>50</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
<td>50</td>
<td>100.0</td>
</tr>
<tr>
<td>Perwira Jaya</td>
<td>81</td>
<td>53.6</td>
<td>70</td>
<td>46.4</td>
<td>151</td>
<td>100.0</td>
</tr>
<tr>
<td>Bandar Tun Razak</td>
<td>61</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
<td>61</td>
<td>100.0</td>
</tr>
<tr>
<td>Non-Felda Scheme</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chenderawasih</td>
<td>113</td>
<td>36.6</td>
<td>196</td>
<td>63.4</td>
<td>309</td>
<td>100.0</td>
</tr>
<tr>
<td>Ibam</td>
<td>79</td>
<td>73.8</td>
<td>28</td>
<td>26.2</td>
<td>107</td>
<td>100.0</td>
</tr>
<tr>
<td>Kota Bahagia</td>
<td>90</td>
<td>49.7</td>
<td>91</td>
<td>50.3</td>
<td>181</td>
<td>100.0</td>
</tr>
<tr>
<td>Kota Perdana</td>
<td>135</td>
<td>65.9</td>
<td>70</td>
<td>34.1</td>
<td>205</td>
<td>100.0</td>
</tr>
<tr>
<td>Kota Shahbandar</td>
<td>39</td>
<td>20.0</td>
<td>156</td>
<td>80.0</td>
<td>195</td>
<td>100.0</td>
</tr>
<tr>
<td>Melati</td>
<td>59</td>
<td>58.4</td>
<td>42</td>
<td>41.6</td>
<td>101</td>
<td>100.0</td>
</tr>
<tr>
<td>Muadzam Shah</td>
<td>575</td>
<td>99.8</td>
<td>1</td>
<td>0.0</td>
<td>576</td>
<td>100.0</td>
</tr>
<tr>
<td>Paloh Hinai</td>
<td>132</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
<td>132</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1,464</td>
<td>69.1</td>
<td>654</td>
<td>30.9</td>
<td>2,118</td>
<td>100.0</td>
</tr>
</tbody>
</table>


It is difficult to assess the performance of the regional planners in Pahang Tenggara on these figures. Townships with no vacancies (other than the regional centre Muadzam Shah) are dominated by FELDA settlers who, on joining the scheme, are guaranteed a house. Those with low occupancy rate are settlements dominated by labourers employed by private developers. As the developers have provided longhouse (kongsi) accommodation free of charge to save commuting time and house illegal immigrants from Indonesia (especially during the 1978-84 economic boom), there is no pressure on the accommodation by the regional planner in Pahang Tenggara, especially as illegal immigrants are ineligible. Thus, though getting residents in townships has been one of the regional planner's primary tasks, the rate of occupancy is beyond his control in Pahang Tenggara.
Unlike the regional planner in Pahang Tenggara, the Kesedar planner has more flexibility governed by an indicative plan rather than a master plan. Nevertheless, the targets, particularly for its regional centre of Gua Musang, seemed unattainable within ten years. Indeed, the regional planners in Pahang Tenggara and Kesedar seem to be victims of unrealistic targets established by decision-makers in their haste to foster rural urbanisation which is seen as a means of raising the status of the rural poor. Symptomatic of the problem is the fact that the regional planner in Pahang Tenggara has been able to spend only 35 per cent of the $9,600,000 budget allocated to township development in 1986 (Dara, 1986). Yet, Pahang Tenggara was a 'favoured region' compared with Kesedar which received up to 1987 only 20 per cent of the $500 million promised in 1978 for all development projects (Hamzah, 1987:57) – a reflection that Kelantan has not always been controlled by the governing party – UMNO – which has resulted in unfavourable allocations (see Nik Mahmood, 1984). In addition to township development, we use another yardstick to measure the regional planners' performance – project investments.

Project Investments

As noted, regional planners are implementors and coordinators of the New Economic Policy on the frontiers. In support of that policy, there is a need to mobilise and acquire more financial means either by public agencies or private investors. Consequently, there has been great pressure on land resources initially earmarked as reserved areas by the Pahang Tenggara Master Plan. This pressure has become even greater when commodity prices are high and more profits can be made. Between 1971 and 1984, in fact, the agricultural development within Pahang Tenggara exceeded the targets set by the Master Plan by almost 50 per cent (Table 4.5). FELDA exceeded its target by about 80 per cent as, in the 1970s, more rural poor were attracted by higher income brought about by oil palm. Its total area covered 45 per cent of the whole agricultural land of Pahang Tenggara.
The public agencies and the small-private estates accounted for the highest proportion in exceeding their original allotted targets. This was notably due to their relatively small allocated areas in the Master Plan. Indeed, the public agencies have undergone substantial expansion under the NEP as a 'catalyst' to help create Malay entrepreneurs and managers at the national level. Consequently, there are also many public investment projects in both Pahang Tenggara and Kesedar. Few of these public enterprises, however, did well. Tables 4.6A and 4.6B show the financial status of some selected public enterprises. These comprised businesses in cattle farming, mining, cash cropping, construction of building materials, logging, sawmill and hotel catering. Until the end of 1986, almost all were in deficit.

Table 4.5
Agricultural Development in Pahang Tenggara, 1971-84

<table>
<thead>
<tr>
<th>Agency</th>
<th>Proposed By Master Plan (hectare)</th>
<th>Actually Developed (hectare)</th>
<th>% Over or Below Target</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FELDA</td>
<td>77,740.9</td>
<td>138,753.3</td>
<td>78.5</td>
<td>44.8</td>
</tr>
<tr>
<td>Joint-Venture Estates</td>
<td>31,242.1</td>
<td>21,574.5</td>
<td>-30.9</td>
<td>7.0</td>
</tr>
<tr>
<td>Public Estates</td>
<td>12,181.1</td>
<td>26,729.2</td>
<td>119.4</td>
<td>8.6</td>
</tr>
<tr>
<td>Mardi(a)</td>
<td>890.3</td>
<td>1,011.7</td>
<td>13.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large Estates</td>
<td>69,525.7</td>
<td>88,003.1</td>
<td>26.5</td>
<td>28.4</td>
</tr>
<tr>
<td>Small Estates</td>
<td>5,626.2</td>
<td>15,034.2</td>
<td>167.2</td>
<td>4.8</td>
</tr>
<tr>
<td>Small Holdings</td>
<td>13,840.3</td>
<td>18,869.7</td>
<td>36.3</td>
<td>6.1</td>
</tr>
<tr>
<td>Total</td>
<td>211,046.6</td>
<td>309,975.7</td>
<td>46.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: *Experimental farms of Malaysian Agricultural Research and Development Institute.
Source: Dara, 1985:16.
Table 4.6A
Pahang Tenggara Project Investments

<table>
<thead>
<tr>
<th>Projects</th>
<th>Activities</th>
<th>Profit (+)/Debit (-) (Till End of 1986 in Thousand $)</th>
</tr>
</thead>
</table>

**Own Corporations**

<table>
<thead>
<tr>
<th>Sdn Bhd</th>
<th>Activities</th>
<th>Profit (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pahangbif</td>
<td>Beef import, cattle farming</td>
<td>5,513 (-)</td>
</tr>
<tr>
<td>Darabif</td>
<td>Beef import, cattle farming</td>
<td>4,767 (-)</td>
</tr>
<tr>
<td>Binadara</td>
<td>House construction, quarrying</td>
<td>3,582 (-)</td>
</tr>
<tr>
<td>Dara Ornamental Minerals</td>
<td>Mining and Processing of serpentine</td>
<td>1,389 (-)</td>
</tr>
<tr>
<td>Sawira</td>
<td>Oil palm plantation, oil extraction</td>
<td>10,695 (-)</td>
</tr>
<tr>
<td>Dara Koko Buahan</td>
<td>Diversified crop plantation</td>
<td>98 (-)</td>
</tr>
<tr>
<td>Pasaranika Dara</td>
<td>Miscellaneous trading</td>
<td>1,675 (-)</td>
</tr>
<tr>
<td>Dara Fabricators Sdn Bhd</td>
<td>Pre-fabricated low-cost housing components</td>
<td>2,880 (-)</td>
</tr>
<tr>
<td>Dara Wood Sdn Bhd</td>
<td>Pre-fabricated housing components</td>
<td>5,432 b (-)</td>
</tr>
<tr>
<td>Bata Dara</td>
<td>Brick manufacturing</td>
<td>Sold in 1986</td>
</tr>
</tbody>
</table>

**Joint-Ventures**

<table>
<thead>
<tr>
<th>Sdn Bhd</th>
<th>Activities</th>
<th>Profit (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tehdara</td>
<td>Oil palm, tea plantation</td>
<td>1,601 (-)</td>
</tr>
<tr>
<td>Dara Lam Soon</td>
<td>Oil palm, oil extraction</td>
<td>20,193 (+)</td>
</tr>
<tr>
<td>Iham Sdn Bhd</td>
<td>Logging</td>
<td>8,641 c (-)</td>
</tr>
<tr>
<td>Perkayuan Tenggara</td>
<td>Logging, sawmill</td>
<td>77 (-)</td>
</tr>
<tr>
<td>Lesong Forest Products</td>
<td>Logging, sawmill</td>
<td>9,130 (-)</td>
</tr>
</tbody>
</table>

**Note:**
a. Sendirian Berhad (private company limited).
c. Till the end of 1985.

Table 4.6B

Kesedar Project Investments

<table>
<thead>
<tr>
<th>Name</th>
<th>Activities</th>
<th>Profit (+)/ Debit (-) $^a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kesedar Sawmill Sdn Bhd</td>
<td>Mainly sawmill</td>
<td>99,700 (-)</td>
</tr>
<tr>
<td>Kesedar Inn Sdn Bhd</td>
<td>Hotel and catering</td>
<td>79,780 (-)</td>
</tr>
<tr>
<td>Kesedar Galian Sdn Bhd</td>
<td>Brick manufacturing</td>
<td>7,050 (-)</td>
</tr>
</tbody>
</table>

Note: ^a For the first six months of 1987 only.

Whether the main reason of deficit was a question of management or due to the disadvantaged location of those businesses remains to be examined. My visit to the 'Kesedar Inn' in December 1987 was useful for understanding the situation in some way. The hotel is well located off the main street which runs towards the old established centre of Gua Musang. It caters for a clientele consisting mainly of government officials who visit the town on special occasions. There were few regular customers. This means that it is difficult to maintain a good standard of service. Obviously, the hotel was of higher standard than the other modest inns downtown. But 'Kesedar Inn' charged 40 per cent more for the room rate and this would have probably discouraged non-government officials -- workers and small contractors -- who came from different parts of the country.

Thus, we can suggest that more extra land has been used for agricultural production to cover the financial burden of public enterprises. Under the NEP, there has been an urgent task to create managerial posts and raise the equity share for Malays with government funding. Consequently, whether such enterprises make profits at the initial stage is a secondary matter. This investment policy, however, has been beyond the control of the regional planners in Pahang Tenggara and Kesedar. The regional planners can take satisfaction in their overall performance because the Minister has the power to dismiss them. The key omission, however, is the absence of any mechanism for
assessing how the settlers in Pahang Tenggara and Kesedar respond to the centrally imposed regional planning.

Resume

This chapter has outlined the structure of regional planning in Malaysia and highlighted that the planners in Pahang Tenggara and Kesedar have little input into planning and decision-making. Nevertheless, the planners in Pahang Tenggara and Kesedar have played a key role in managing the implementation of a variety of infrastructure and investment projects. Assessments of their respective performance proved difficult because the only yardstick for gauging their effectiveness are reports submitted by the planners to higher authorities. Basically, they try to achieve targets set but they have little control over the investment programs made for their respective regions. These programs are subject to the will of politicians who are again influenced by developers and other interest groups. They all work outside the formal planning structure but have substantial impact on the regional development outcome. Thus, we cannot assess the performance of regional planners. There has been, however, no assessment of the effect of regional policies on the settlers in Pahang Tenggara and Kesedar. This evaluation is undertaken in Chapters 5 and 6.
CHAPTER 5

SETTLER'S EXPERIENCE: THE ECONOMIC ASPECTS

Settlers are at the forefront of the Malaysian government's regional development policy for resource frontier regions. As noted, they have been encouraged to move from different parts of Malaysia into planned settlements. Any assessment of the success of the government's policy hinges upon whether the living standards of the settlers have improved or are sustainable. There is considerable controversy over this matter among a variety of observers. Macro studies by Bahrin and Parera (1977), MacAndrews (1978), Peacock (1979), for instance, have acknowledged FELDA settlers' overall improvement in income. Their conclusion has been bolstered by detailed field studies by Blair and M. Noor (1978), Chan and Lim (1981) and Omar Din (1981). Conversely, Baharuddin (1979) and Robertson (1984) have contended that progress in settlers' living standards is not sustainable. Inevitably, they suggest that settlers will decline into poverty. These studies, however, have not been conclusive and further case studies, particularly comparative studies are required. Admittedly, Chan and Lim (1981) have considered three settlements but their utility is limited because the conditions of living standards was focused on income. Although income is a key factor in any assessment of living standards, other characteristics must be surveyed. More particularly, the different aspects of assessment must be seen from the settler's viewpoint. Moreover, there is a need to examine the process of change (before and after the move) and the settlers' relationship with Malaysia's broad regional development objectives.

There is a pressing need for an in-depth study comparing two areas established at different dates so that contrasting responses from settlers can be obtained. A comparative study of two schemes is important because it shows how two areas planted with the same crop (oil palm) under identical type of management but at different stages can lead to diverse results. Thus, by explaining that settlers' income corresponds with yield levels of
oil palm trees (according to age) and available secondary job opportunities in each area, a more comprehensive picture of income change is provided. This eliminates biases arising from studying one single scheme.

One this basis, Bandar Tun Razak, an older scheme in Pahang Tenggara and Ciku, a younger scheme in the South Kelantan region were chosen. Moreover, they were deliberately selected from two east coast states because they serve the objective of examining the long-term economic and social sustainability of the FELDA program and the consequences of Malaysia’s resource frontier strategy since 1970. As already stated, the strategy aims at narrowing the disparity between the west and east coasts by concentrating infrastructure and productive investment at some townships and rural centres in newly-cleared zones.

The comparative study also enables us to raise a series of basic questions on the living standards of settlers. Not only do they include a question on change in income before and after the move but others on land holdings and employment. As employment data can be misleading a further basic question is raised: how have patterns of assets and expenditure been altered by change in income? Based on the settlers’ profiles we are in a position to discuss the controversy over living standards and the issue of sustainability.

In conducting this survey attention is concentrated on two FELDA schemes: Bandar Tun Razak in Pahang Tenggara and Ciku in Kesedar (see Figure 4.1). One hundred settler households were interviewed in each area between December 1987 and February 1988 (see Appendix 0.1 for details). Aggregate data from these surveys are complemented by reference to two in-depth household case studies – the Kamal family in Bandar Tun Razak and Jusof family in Ciku. Before entering the question of income change, we need to ascertain whether the paramount motive of settlers was to improve their income (section 1). Subsequently, a comparative analysis of the results of the surveys is used to consider changes in incomes (section 2), expenditure pattern (section 3), assets (section 4), occupational structure (section 5) and land holding size (section 6).
Finally, we enter the controversy over changes in settlers' living standards and sustainability (section 7).

1. MOTIVES FOR RESETTLEMENT

An assessment of why settlers moved into the resource frontier is elusive. Short of a 'lie detector' test there is no way of finding out the truth. All that we can do is to question settlers about their motives. Income is the paramount 'pull factor' assigned by planners, politicians and academics. But is this true?

A survey of settler's motives raised this issue. An open-ended question was asked as to why they came to move to the resettled area. The answers were more complex than assumed by planners, politicians and academics as five sets of reasons were given: higher income, employment stability, access to land, improved prospects for children and other various replies. As shown in Figure 5.1, income was the leading but not the dominating motive. 'More money' and 'escaping poverty' were the reasons given by almost half of the Bandar Tun Razak and Ciku settlers for participation in FELDA. Although these results underline the Malaysian government's emphasis on improving rural incomes, the pull factor was more complex.

Another key motive was the wish for a 'more stable life'. The Malay term kehidupan tetap (literally permanent livelihood) was often expressed and used by settlers to imply security and stability involving, in particular, life-long guaranteed employment and an acceptable living environment. Though the expression was less precise, it can best be examined, in economic terms, in terms of employment - including both primary and secondary occupations. Indeed, job security and opportunity are essential parameters closely associated with settlers' standards of living.

Income and stability were, for example, the twin reasons for the Kamal family leaving for Bandar Tun Razak. Kamal bin Ahmad was then 29 years old, living with his parents in Kampung Pianggu, Rompin District of Pahang. He was married six years
earlier and had already three children. Tapping old rubber trees in his parents' 4-hectare holding could not offer him a comfortable living, and his parents were growing old and increasingly needed his support. Consequently, he joined the FELDA scheme in 1978.

Income and stability were also paramount reasons for Jusof bin Kassim leaving Kampung Tumpat, Kelantan for Ciku. Then 31 years old, he was a fisherman, renting a small boat from a fellow fisherman in his village. His low income was further affected by the Northeast Monsoon which forced him to fish near the coast, resulting in poor catches. That made his life unstable and income insecure. In search of a better livelihood including the future of his four children, he went to the Ciku scheme in 1981.

*Source: Fieldwork.*
Clearly, the Kamal and Jusof families were motivated by the same aspirations. Yet, one in five Bandar Tun Razak settlers and one in seven in Ciku considered land as a reason for moving. Surprisingly, the desire for land was not stressed as much as might be expected, despite the record of land shortage in rural West Malaysia. Thus, the improvement, or otherwise, in access to land before and after moving needs investigation. Settlers also showed considerable concern with their children's future as a motive for migration. In this respect, they wished they could offer their children better educational opportunities so that they would lead a more successful life in the future outside the scheme as government servants and professionals (a theme to be taken up in Chapter 6 which examines social factors).

The residual category in Figure 5.1 classified under 'others' comprised a range of answers, such as independence, starting a new life, business opportunities, better social facilities, opportunity to own a house, frustration with the previous occupation, poor relationship with parents, response to government policy or the New Economic Policy. While some of these motives were more a consequence of personal sentiments, they also included a pragmatic demand for a better livelihood either for settlers themselves or their children. Many of these will be taken up again in Chapter 6.

Thus, when we examine the motives and expectations of the settlers, it is obvious that seeking higher income was the most important but not the only criterion that motivated settlers to move. Settlers, indeed, had a wider and more complex range of motives than government policy makers and planners had in mind. There is, therefore, a need for more in-depth analysis of factors associated with the change in income levels (employment and land) as well as a more critical look at income itself, encompassing new expenditure patterns and holdings of assets. These will be the concern of this chapter and, it is hoped, will add new insight into the economic performance of settlers on the Malaysian frontiers.
2. CHANGE IN INCOME

Inevitably, a change of income is the outcome of shifting from one place to another. Not only did most settlers want to achieve this objective but so did Malaysia's politicians and planners. But to what extent has this aim been realised? In response to this question, attention is focused on examining the change in household income of Bandar Tun Razak and Ciku before and after they moved.

Before examining any achievement of this nature, we first bring up the computation methods. To compute the household income, we include both primary and secondary sources made by all resident household members. Non-resident household members are excluded even though some of them may from time to time contribute to the overall household income by means of remittances. Settlers' primary income is derived from their tasks performed within the FELDA plantations and was taken from FELDA's official records for 1987. This income was the net income after deduction of loan instalments and other contributions whereas their secondary income was obtained through a wide range of occupations including farming, contract implementing, trading, wage earning and small-scale cash cropping.

Net income was used because the assessment of change in settlers' living standards was not based on income alone but also on the change in their expenditure patterns, asset holdings and occupational structures. Using this method, the life patterns of settlers would be more accurately reflected by the actual amount of disposable cash. Further, the use of gross income will be incompatible for a comparative study as 55 per cent of Ciku settlers were still not incorporated into the block system whereas all Bandar Tun Razak

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1 Taking a typical month in 1987 for instance, as long as a settler's net monthly income in Bandar Tun Razak reached $350.00 (a guaranteed amount for minimal living expenses), he had to pay $100.49 for the loan, $40.00 for replanting fund, $8.88 for land tax and $3.00 as membership fee to KPR (Scheme Development Authority).

2 These non-block members received an income much lower than block members (less than half in the case of Ciku). Their remuneration was based on the number of workdays and the output of palm fruits. They were not required to start loan repayment as yet.
settlements were block members (to be further-explained in Section 5). Such large income gap between block and non-block members is transitory within the FELDA arrangement. Thus, it is best not to use the gross income for our comparison purposes while the eventual capital gains by settlers have to be acknowledged (also discussed later in Chapter 6).

By focusing on income, the most significant issue of concern, therefore, is: how have the income levels changed; and why have incomes of Bandar Tun Razak differed from those in Ciku? In tackling these questions, we concentrate on settlers' change of income levels before and after they migrated and, by briefly examining the background of the two areas, we can also explain why their income levels were different.

**Income Before Moving**

Calculations of income before moving are derived from our survey which questioned settlers in Bandar Tun Razak and Ciku about the main and secondary activities of members of the household undertaken in their place of origin. This figure includes income from both wives and those children living with the male household head. These data of individual household incomes from both Bandar Tun Razak and Ciku are then grouped into five categories (Table 5.1). The data show that the mean income levels of most settlers of Bandar Tun Razak and Ciku before moving were quite similar. Bandar Tun Razak settlers earned slightly more than their counterparts in Ciku. Yet, more than 70 per cent of settlers in both areas earned less than $400 per month. Revealing their poor background, settlers' mean income before they moved was relatively low by the Malaysian standards – the rural mean household income was $590
in 1979 (see Government of Malaysia, 1981:56). On average, Bandar Tun Razak settlers received 51 per cent of the mean while their counterparts in Ciku only 47 per cent. Thus, in general terms, both Bandar Tun Razak and Ciku settlers came from Malaysia's rural poor and sought to escape poverty. The plight of those settlers below the mean income level is highlighted by examining Kamal and Jusof's household before they moved.

Table 5.1

Distribution of Household Monthly Income Before and After Moving in Bandar Tun Razak and Ciku

<table>
<thead>
<tr>
<th>Household Monthly Income ($)</th>
<th>Bandar Tun Razak</th>
<th>Ciku</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage of Households</td>
<td>Percentage of Households</td>
</tr>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>&lt;100</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>100-399</td>
<td>70</td>
<td>-</td>
</tr>
<tr>
<td>400-699</td>
<td>23</td>
<td>43</td>
</tr>
<tr>
<td>700-999</td>
<td>3</td>
<td>44</td>
</tr>
<tr>
<td>&gt;1000</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>Total Households</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Mean ($)</td>
<td>302</td>
<td>803</td>
</tr>
<tr>
<td>Median ($)</td>
<td>250</td>
<td>733</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>180.16</td>
<td>276.93</td>
</tr>
<tr>
<td>Coefficient of Variation</td>
<td>59.66</td>
<td>34.49</td>
</tr>
</tbody>
</table>

Note: 1 Average household monthly income taken from 1987.
Source: Fieldwork.

The year 1979 is selected because the highest proportion of Bandar Tun Razak settlers moved to the scheme during that year while no data have been obtained for 1983 – the median year taken for assessment.  

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Kamal's income in Kampung Pianggu in Rompin District, Pahang was only $120 per month which put him in the second lowest category. This income was derived primarily from tapping rubber on his parent's 4-hectare holding. As the rubber trees were too old to produce a good yield, he also worked occasionally as a labourer to supplement his income. Jusof's income in Kampung Tumpar, Kelantan was higher than Kamal as he earned $200 but he was still in the second lowest category.

In contrast to Kamal and Jusof, there were a few households in both Bandar Tun Razak and Ciku whose monthly income recorded more than $700. This income diversity is indicated by the high figures in the coefficient of variation (60 and more). The three households in the topmost category in Bandar Tun Razak comprised an ex-Singapore construction worker, a skilled sawmill operator and a married couple working in an office. Conversely in Ciku, three of the four highest earners were ex-army corps members while the fourth was an experienced builder.

There were other differences, too, between settlers from the two areas. Overall, Ciku settlers were slightly poorer because nearly all of them came from the northern part of Kelantan where land fragmentation and lack of employment opportunities had been one of the most serious in the country (Alias, 1983; Ali, 1983; Government of Malaysia, 1986a). Conversely, Bandar Tun Razak settlers were recruited from most states in West Malaysia including Selangor – the richest state. Further, by examining primary income levels, it was found that settlers of both areas made identical average incomes of about $245 per household (Table 5.2). This indicates that the income differential between Bandar Tun Razak and Ciku, albeit small, had originated in disparity in secondary job opportunities and their levels of remuneration. Indeed, through these secondary sources, a Bandar Tun Razak settler on average earned about 10 per cent more than a Ciku settler. Hence, as we can see, the ratio of primary to secondary income was much larger in the case of Ciku settlers. After studying the income structure in the settlers' place of origin of both areas, we have now a general understanding of their income backgrounds. On this basis, we can proceed to study the extent of change in income levels after the move.
Table 5.2

Change in Ratio of Primary to Secondary Income ($) Per Average Household

<table>
<thead>
<tr>
<th>Settlement</th>
<th>Before</th>
<th></th>
<th>After</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary</td>
<td>Secondary Ratio</td>
<td>Primary</td>
<td>Secondary Ratio</td>
</tr>
<tr>
<td>Bandar Tun Razak</td>
<td>248</td>
<td>54</td>
<td>4.6:1</td>
<td>625</td>
</tr>
<tr>
<td>Ciku</td>
<td>242</td>
<td>33</td>
<td>7.3:1</td>
<td>410</td>
</tr>
</tbody>
</table>

Source: Fieldwork.

Income After moving

Settlers came from a background of general poverty and diversity of income but their participation in FELDA resettlement has led to two impressive changes. The first was the significant improvement in cash incomes. Table 5.1 shows that settlers received higher average monthly incomes after joining the FELDA schemes. The improvement was more marked in Bandar Tun Razak (270 per cent) than Ciku settlers (180 per cent). The increase was indeed large and represented a rapid improvement for both groups of settlers. Secondly, Table 5.1 also shows that the change in coefficient of variation from place of origin to the frontier areas had narrowed down their income disparity in the process. Clearly, this had been brought about by grouping settlers to perform identical tasks in the oil palm plantations, a consequence of change from occupational diversity to virtual homogeneity.

As one can observe in the same table, there was a great differential in income levels between Bandar Tun Razak and Ciku settlers after moving— all settlers in the former made more than $400 per month whereas there were still 52 per cent in the latter who received less than that amount. While more than half of Bandar Tun Razak settlers acquired more than $700 a month, a quarter of Ciku settlers even asserted that they earned more in their place of origin. Yet, each settler had received an allocation of 4 hectares of oil palm. This income differential between Bandar Tun Razak and Ciku stemmed from two main factors: Bandar Tun Razak was established before Ciku and its
oil palms were more mature (i.e. they had reached the second stage of the oil palm cycle) and their different environments. While Bandar Tun Razak's Pahang Tenggara region is endowed with deeper, more fertile soils and less steep terrain, the Ciku area is found amidst hilly limestone valleys in South Kelantan which form part of the Peninsular Main Range. Ciku's topography and soils, being less favourable, influences to an extent the yield of its settlers' plantations.

Our field survey indicates that settlers in Bandar Tun Razak moved in between 1977 and 1983, with the greatest number being recorded in 1979. On the other hand, Ciku settlers arrived between 1980 and 1986. The difference in date of arrival is reflected in settlers' levels of income. The settlers' primary income levels were mainly dependent on the yield levels of oil palm and its market price. Developed at different times, the palm yields of Bandar Tun Razak and Ciku vary accordingly (Figure 5.2). Planted in 1974-1977, the palm trees in Bandar Tun Razak had reached maturity in 1980-1983 where all settlers belonged to the 'block system'. By contrast, Ciku plantations were grown later in 1980-1982. Consequently, only 45 per cent of its settlers became incorporated in the 'block system' enabling them to earn a mean monthly income of $594 in 1987. The other 55 per cent of non-members made only $260 per month (paid on subsistence wage). Thus, the income disparity between block and non-block members was very marked.

The income levels between Bandar Tun Razak and Ciku are expected to be closer by the end of 1988 when all Ciku settlers will become 'block system' members. Moreover, as the oil palm yield in Bandar Tun Razak was nearing the peak level at the time of survey (December 1987) whereas Ciku had yet to reach it, Ciku settlers are expected to catch up soon with their counterparts in income and eventually pass them (Figure 5.2).

The difference in the stage of development is also reflected in the income levels of Kamal and Jusof families. In Bandar Tun Razak, Kamal, a block member, had moved into the second topmost bracket and was paid $680 per month by FELDA. When he arrived in the Pahang Tenggara frontier in 1978, his income was not much higher than his earlier one. Conditions began to improve in 1982 when settlers in his scheme were
Figure 5.2: Life Cycle of Oil Palm Yield

Note: The average yield per unit area in Bandar Tun Razak and Ciku was higher than that shown on the graph. Nevertheless, the trend of variation remains relevant – 25 years being considered the optimal productive period.

Source: Ng, Swee Kee, 1972:112; See also Mansoor and Barlow, 1988:21 for general reference.
incorporated into the 'block system' which bolstered income. In 1984, the palm oil price fetched up to $2,000 per tonne which enabled settlers to make up to $1,000-1,500 per month. Unlike Kamal, Jusof was still not a 'block system' member. Consequently, he received only $320, a figure however higher than most other non-block members because he worked extra hours and the yield from his block was also relatively high.

Besides incomes from oil palm plantations, settlers' also acquired cash from secondary activities. Table 5.2 shows that secondary activities experienced an increased importance from the settlers' place of origin to the resettled region, as indicated by the change in ratio of primary to secondary jobs. The extent was greater in Bandar Tun Razak than Ciku. This change in ratio corresponds well with our case study of the Kamal and Jusof families. In his place of origin, Kamal's secondary activities were rare. Occasionally, he would take up any offer during the leaf-falling season when yields from rubber trees were extremely low. He earned about $250 per year. His counterpart Jusof, during the Monsoon from October to March, would help other fishermen with larger boats to sort out fish. The income derived in this way came to nearly $200 per month.

After the move, the nature of secondary income of Kamal and Jusof underwent a drastic change. Kamal was elected block leader by other members of his working team. For his duty, he was paid a monthly allowance of $80. To further increase household income, he sometimes helped other settlers to do harvesting which earned him $30 per month. Thus, his monthly average in 1987 totalled $760. In contrast, Jusof had a much simpler subsidiary occupation: a part-time cleaner in a nearby plantation which paid him $50 a month. His total monthly average was $370, which was half of Kamal's in 1987. The wives of Kamal and Jusof had played no role in contributing household income. They both remained as housewives ever since they were married in their place of origin. Their case was typical of the great majority of women and children in both Bandar Tun Razak and Ciku, though they share equal responsibility in any household unit. We examine here how this has evolved.
Change in Women and Children's Income Sources

From their place of origin, women and children followed men to the FELDA oil palm schemes. They were taken as support components because the relatively heavy tasks required for harvesting are assumed to be men's job. In these circumstances, how has their income-earning ability changed?

Our survey finds that the shift had been to the general disadvantage of women. Before moving, 11 and 15 per cent of the women now in Bandar Tun Razak and Ciku earned a cash income. It was equivalent to some 10 per cent of men's primary income in Bandar Tun Razak and 7 per cent in Ciku. After the move, these proportions declined to 2 per cent in both areas. There were, however, a few exceptional cases when female household heads assumed man's role in the field after divorce or their husbands had died. The number of female households thus involved in the sample was small, with four in Bandar Tun Razak and three in Ciku.

Children's contribution to household income was almost zero in the place of origin due to their age. Although on occasions, some young children did help their parents to labour in the rice fields after school, their input could not be considered in the household income. After migrating, they had remained basically as dependent as before while their total income aggregate was found to be less than 2 per cent of men's primary income in both Bandar Tun Razak and Ciku (excluding a few who worked away from home).

The survey on income change has indicated that most households have achieved a higher income level after they moved. The average improvement was quite significant. It was more marked for settlers of Bandar Tun Razak than their Ciku counterparts because the former enjoyed the advantages of an older and better established location having oil palm with higher yields. Ciku settlers are, however, expected to improve their relative income levels in the near future when their oil palm grows older. The progress was even more impressive if we take into account block members who were able to pay off from their gross income some $150 monthly for land loan, replanting fund and land tax. The
income disparity between settlers in each area had narrowed down after moving as they now performed basically identical tasks. Moreover, it has also been found that the proportion of settlers' secondary income to primary income had progressed over time. But the shift was biased towards men. While children's contribution to household income remained insignificant, almost all women saw their contribution declined from their place of origin to the resettled areas. Improvement in income usually leads to new expenditure patterns which reflect the real income progress. Thus, we now investigate how settlers use their income to meet their daily expenses.

3. REAL INCOME AND NEW EXPENDITURE PATTERNS

As noted in the previous section, there has been a marked improvement in income. This increase was due mainly to payments from FELDA (especially if they were 'block system' members at Bandar Tun Razak) but also from enhanced secondary income sources. Although they may have more cash in hand than before, we still need to ask whether this was a real improvement. To verify this, we first look into inflation patterns and secondly, at the new forms of expenditure required in their new homes and jobs. Then, we are able to gauge more closely if higher incomes have been translated into new and improved consumption patterns.

The consumer price index for Malaysia has risen steadily since 1979 – the year when the highest number of settlers moved into Bandar Tun Razak (1983 is chosen as the median year for Ciku). Thus, their higher incomes have had to be used to pay higher prices for goods. Although the national consumer price index is not an especially good measure for inflation rates experienced by settlers, it does provide some indication of how real incomes might have changed. The deflated income data are given in Table 5.3, which demonstrates that real incomes have still increased. Real income had almost doubled in Bandar Tun Razak and had increased by two-thirds in Ciku. Such progress was still very satisfactory. Again, Ciku incomes remained lower. Its later start and lower base incomes mean that the improvement experienced had actually been at a higher rate.
than Bandar Tun Razak. Thus, in quantitative terms, real incomes have risen sharply. But what about new expenses and the new necessities that settlers required which ate into their family's pay packets? For this, we have to take a close look at the expenditure patterns.

### Table 5.3

**Progress in Real Monthly Income**

<table>
<thead>
<tr>
<th>Income ($)</th>
<th>Bandar Tun Razak</th>
<th>Ciku</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Household Income Before</td>
<td>302</td>
<td>276</td>
</tr>
<tr>
<td>Mean Household Income After</td>
<td>803</td>
<td>488</td>
</tr>
<tr>
<td>Real Mean Household Income&lt;sup&gt;a&lt;/sup&gt; After</td>
<td>594</td>
<td>463</td>
</tr>
<tr>
<td>Mean Annual Rate of Real Income Increase After</td>
<td>8.8%</td>
<td>13.8%</td>
</tr>
</tbody>
</table>

<sup>a</sup> Deflated using the consumer price index released in *Government of Malaysia, 1982/83 and 1983/84; 1988:12.*

### Characteristics of Expenditure Patterns

Settlers' household expenses were recorded on a monthly basis in classified items shown in Table 5.4. The table does not include settlers' monthly instalments required for purchases of consumer durables – a common practice found among settlers especially those from Bandar Tun Razak. It has also excluded occasional eating-out during settlers' visits to nearby towns and other contingency expenses which are irregular in nature. It provides, though, a general indication of how settlers spent their money on a monthly basis.

The expenses listed in Table 5.4 can be divided into basically two parts: basic necessities and what may be considered non-basic necessities (entertainment, ceremonies and remittances) plus savings. Many settlers stated that since moving, their expenses had increased: they had now more children and had to pay more for their children's education; they had to run a motorcycle or spend more to get between home and the work...
Table 5.4

Average Monthly Expenditure Per Settler Household by Items ($)

<table>
<thead>
<tr>
<th>Item</th>
<th>Bandar Tun Razak</th>
<th></th>
<th>Ciku</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>%</td>
<td>Amount</td>
<td>%</td>
</tr>
<tr>
<td>Basic Necessities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td>39.5</td>
<td>7.4</td>
<td>30.4</td>
<td>8.2</td>
</tr>
<tr>
<td>Other Food</td>
<td>221.8</td>
<td>41.5</td>
<td>165.0</td>
<td>44.4</td>
</tr>
<tr>
<td>Clothing &amp; Footwear</td>
<td>28.7</td>
<td>5.4</td>
<td>20.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Children's Education</td>
<td>40.1</td>
<td>7.5</td>
<td>55.2</td>
<td>14.8</td>
</tr>
<tr>
<td>Medicine</td>
<td>6.8</td>
<td>1.3</td>
<td>3.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Private Transport (Motorcycle)</td>
<td>49.9</td>
<td>9.3</td>
<td>30.3</td>
<td>8.2</td>
</tr>
<tr>
<td>Lighting</td>
<td>13.3</td>
<td>2.5</td>
<td>8.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Water</td>
<td>8.5</td>
<td>1.6</td>
<td>0.8</td>
<td>0.2</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>408.6</td>
<td>76.5</td>
<td>312.3</td>
<td>84.0</td>
</tr>
<tr>
<td>Non-Basic Necessities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cigarettes</td>
<td>26.0</td>
<td>4.8</td>
<td>14.0</td>
<td>3.8</td>
</tr>
<tr>
<td>Private Transport (car, truck and van)</td>
<td>38.5</td>
<td>7.2</td>
<td>9.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Public Transport</td>
<td>19.7</td>
<td>3.7</td>
<td>16.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Entertainment</td>
<td>26.3</td>
<td>4.9</td>
<td>13.4</td>
<td>3.6</td>
</tr>
<tr>
<td>Ceremony</td>
<td>5.9</td>
<td>1.1</td>
<td>2.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Remittance</td>
<td>9.5</td>
<td>1.8</td>
<td>3.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Sub-total</td>
<td>125.9</td>
<td>23.5</td>
<td>59.5</td>
<td>16.0</td>
</tr>
<tr>
<td>Average Monthly Expenditure per Household</td>
<td>534.5</td>
<td>100.0</td>
<td>371.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Average Savings per Household</td>
<td>268.5</td>
<td></td>
<td>116.2</td>
<td></td>
</tr>
</tbody>
</table>

Note: Based on a rough estimate of the households' average monthly expenses during 1987 excluding purchase loans and other contingency expenses.

\(a\) Well water.

\(b\) A high proportion of expenses on public transport was for visits to the place of origin during Hari Raya festival (ending of the fasting month) and to nearby townships for entertainment and shopping purposes. Thus, it is considered a non-basic necessity.
place; and local food prices were often higher. In particular, many former near-subsistence farmers now had to buy their entire food intake. All these increases in expenses are included in the data, though it was not possible to compare them with actual expenses before moving because of the great difficulty in compiling past expenditure patterns. Indeed, education, use of motorcycles and other non-food necessities account for about 30 per cent of both Bandar Tun Razak and Ciku settlers—a heavy burden for the households. When food items are added, a further 50 per cent of expenditure is accounted for. Thus, there was little left for 'luxuries' though the average monthly excess (income minus listed expenses) of $269 in Bandar Tun Razak and $116 in Ciku was used usually as a hedge against falling prices, unforeseen expenses, or used for the purchase of consumer durables. Still, when the general pattern of expenses is examined much of the enhanced income has been dissipated on daily necessities, many of which constitute new or substantially increased expenses compared to the place of origin.

Expenditure patterns differ between Bandar Tun Razak and Ciku. An average household in the former spent some 45 per cent more than his counterpart. These differences reflect that the Bandar Tun Razak resident not only received a higher income, but his children were also older and needed more money. Clearly, as settlers from both areas used about half of their expenses on rice and other food, their income was still mainly used to meet basic subsistence needs. Some marked changes, however, had occurred in the food composition of FELDA settlers since 1978. According to the research findings by Blair, Dissanayake and M. Noor (1980: 78-81) on FELDA settlers (conducted in July 1978), the expenditure ratio of rice to other food was found to be 1:3.1. In contrast, the present survey shows that the ratio had altered to 1:5.6 for Bandar Tun Razak and 1:5.4 for Ciku. This change in consumption patterns discloses a marked dietary change. Now, settlers consumed relatively less rice and moved towards a wider

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4 The change must not be over-emphasised. The ratio derived from the present survey has been greatly enlarged by the uneven change of consumer price for rice and fish (the most important items). Between 1978 and 1987, the price of rice increased by 14 per cent compared with 64 per cent for fish (Source: Government of Malaysia, 1982/83 and 1983/84; 1988:12.)
variety of food items than some ten years ago. This shift can be interpreted as a logical response to higher income and, possibly, a sign of improved diets and nutrition.

Among other non-basic items, settlers in both areas allocated a higher proportion of their income to private means of transport. Although this was costly it was a basic requirement for daily commuting to work as FELDA had not established a public transport system. Educational expenses stood out, indicating the concern of settlers with their children's future occupations. This was pronounced in Ciku. There were two main reasons behind Ciku settlers' high allocation to their children's education. First, there was, as yet, no secondary school in the settlement. Consequently, settlers either left their older children with relatives in the place of origin, sent them to boarding schools in Gua Mustang and Kuala Krai or despatched them to school on the bus. Secondly, from poor Kelantan villages, Ciku settlers appreciated that good education for children not only would bring family honour but eventually economic reward.

Among non-basic expenses, settlers' own four-wheeled private vehicles accounted for a small percentage. The large differential between Bandar Tun Razak and Ciku was because the former had twice as many vehicles and they were also more actively used. Bandar Tun Razak settlers' higher income also allowed them to spend twice as much on entertainment as their counterparts. Indeed, in response to their lower income, Ciku settlers had adopted a different strategy in budgeting their expenses, exemplified most markedly in their consumption of cigarettes: there were more smokers in Ciku than in Bandar Tun Razak, yet, on average, the former spent only half of that expended by their counterparts.

The disparity between individual household expenses was found to be great. In Bandar Tun Razak, six households with monthly expenses of more than $1,000 were those having highly rewarding secondary jobs: two contractors transporting fruit bunches from field to factory, one grocery shopkeeper, one purchase officer for FELDA's cooperative, one house builder and one culvert construction worker. Conversely, there
were a few single-person households in Ciku whose household expenses accounted for
less than $100. Housing improvement had been substantial in Bandar Tun Razak but,
because of the lack of savings this was quite minimal in Ciku (Table 5.4). In this regard,
more than 90 per cent of settlers in Bandar Tun Razak had undertaken some kind of
house repair or extension to accommodate more household members while relatively few
had done so in Ciku.

Our case study of the Kamal and Jusof families shows how they planned their
expenses according to income. With a wife and nine dependent children, Kamal in
Bandar Tun Razak spent proportionally more money on rice (50 per cent of other food)
so that he could ensure some savings. For the same reason, he did not want a car as
some other friends did. He had, however, other options in mind which was to renovate
his house. In 1984, with the help of his brother, he used $5,000 for building materials
and successfully expanded his house. Now all family members lived in it more
comfortably than before. His counterpart Jusof at Ciku was more concerned with his
children’s future, especially education. He had two elder sons studying in Kuala Krai—a
14 year-old in a boarding Islamic high school and a 12 year-old in a primary school. This
cost him $75 a month. In order to make ends meet, he spent little on clothes and would
try not to eat out when visiting nearby towns. He had no savings and had from time to
time to borrow from relatives.

The expenditure pattern reflects that despite significant progress in real income,
settlers of both Bandar Tun Razak and Ciku spent most of their income on basic needs.
To most settlers, their expenses had increased after moving because of larger family size,
a motorcycle needed to the work site, relatively higher costs for incoming goods and
other new expenses. Already all of these extra expenses had, to an extent, reduced their
real income. Though savings were available, especially in Bandar Tun Razak, these were
only possible when the palm oil price was high. These savings, however, had to be used
either as a hedge against falling prices, the purchase of consumer goods, or house
expansion to accommodate their expanding family responsibilities. More particularly,
many non-block system members in Ciku had to borrow money from relatives from time to time or, occasionally sell jewellery. Other expenses on luxuries had little significance. Thus, the level of progress in living standards can be considered as minor by the national standards. Another issue that is often used for assessing income improvement is the change in asset holdings. By examining change in this respect, we can verify the extent of income progress.

4. CHANGE IN POSSESSION OF CONSUMER DURABLES

The change in household asset holdings, like the evolution of settlers' expenditure patterns, is also reflective of the variations in income levels. In recognition of the general improvement in settlers' real income, the two key issues which we need to investigate are: have improvements in income been translated into more assets; and, have new patterns of consumption of consumer durables emerged? To answer these two questions, we compare settlers' assets in their place of origin with the resettled area. This analysis of the net shift in assets forms the basis of further gauging the material progress of those living in Bandar Tun Razak and Ciku and explaining the differences between the two.

Assets Before Moving

Generally, settlers did not possess many assets in their place of origin, reflecting their low living standards. Furthermore, a large proportion of household assets were actually owned by their parents with whom they lived. This feature underlines again that the settlers came from poor households. Apart from bicycles (essential for personal transport) and radios (for news and household entertainment), there was little available for expenditure on consumer durables. Electrical appliances and motor vehicles were quite rare.

The change in household assets for settlers of Bandar Tun Razak and Ciku before and after the move is provided in Table 5.5. As stated earlier, settlers from Bandar Tun Razak enjoyed higher income levels than those from Ciku before they moved. Their
ownership of necessities – radios and motorcycles – was higher but, surprisingly, Ciku settlers possessed more luxury items, such as television sets and refrigerators. This difference reflects the timing of the shift. Moving later, Ciku settlers took advantage of the spectacular increase in the availability of low-priced Japanese-made consumer durables during the early 1980s. By the time of this ‘boom’, Bandar Tun Razak settlers had, to a large extent, already moved.

Table 5.5

Household Assets of Settlers in Bandar Tun Razak and Ciku Before and After Moving

<table>
<thead>
<tr>
<th>Item</th>
<th>Bandar Tun Razak</th>
<th>Ciku</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage of Households</td>
<td>Percentage of Households</td>
</tr>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>Radio</td>
<td>78</td>
<td>95</td>
</tr>
<tr>
<td>Television</td>
<td>16</td>
<td>93</td>
</tr>
<tr>
<td>Video</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>Bicycle</td>
<td>74</td>
<td>63</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>40</td>
<td>96</td>
</tr>
<tr>
<td>Car/Truck/Van</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>Gas Cooker</td>
<td>5</td>
<td>77</td>
</tr>
<tr>
<td>Sewing Machine</td>
<td>22</td>
<td>63</td>
</tr>
<tr>
<td>Washing Machine</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>Refrigerator</td>
<td>1</td>
<td>49</td>
</tr>
</tbody>
</table>

Source: Fieldwork.

The general improvement in household income levels has enabled settlers to acquire more assets. Table 5.5 clearly shows this was pronounced in Bandar Tun Razak. The
 Carol was most marked in items such as vehicles, gas cookers and sewing machines. In fact, the improvement in asset holdings was attributable not only to higher income but the relatively lower real price of these consumer goods since the early 1980s. As a result of these factors, settlers acquired higher purchasing power.

Differentials in income levels between settlers of Bandar Tun Razak and Ciku were definitely the main cause of their unbalanced asset holdings. The difference also reflected the lack of electricity. While more than 90 per cent of Bandar Tun Razak settlers owned television sets, only one in four in Ciku had them. Without electricity, Ciku settlers had to use dry battery cells to operate their television sets — their cost was too high for general use. Other assets requiring electricity — video, washing machine and refrigerator were virtually non-existent.

For both areas, however, the ownership of motorcycles was high. Replacing the ubiquitous bicycles, motorcycles had become one of settlers' basic needs in view of the relatively long commuting distance to work (over 6 kilometres for Bandar Tun Razak settlers as against over 4 kilometres for Ciku residents). Correspondingly, Bandar Tun Razak also saw more four-wheeled vehicles than Ciku because the former had more settlers who used them for commercial activities. Thus, patterns of vehicle ownership not only reflected the increased need for better transport on resettlement but also the enhanced capacity of settlers to move from rudimentary push bicycles to motor transport. Further, there was a substantial change in cooking facilities. Firewood, the chief source of cooking fuel in the settlers' place of origin, was largely replaced by gas cookers. As we can see, new patterns of consumption of consumer durables have emerged on the frontier and a new lifestyle of consumption is also taking root. It was commonly found that as long as the settlers' purchasing power allowed, they would attempt to own them and many did so by buying on credit. How these assets were acquired is illustrated in Section 4 of Chapter 6 which focuses on regional access to high-level goods and services.
At the individual level, the change in asset holdings can be demonstrated in the households of the Kamal and Jusof families. In his place of origin, Kamal possessed only a radio and a bicycle. At that time, his wife had to cook with firewood collected from the rubber holding where he worked. After nine years in Bandar Tun Razak, a radical change had occurred as I observed in early January 1988. I was looking carefully at his house when Kamal smilingly parked his motorcycle after being called back by his wife to attend the interview. The newly renovated house was larger than most other houses in the area. When he welcomed me to the sofa in the sitting room, the television set right in front caught my attention immediately — it did not look new but was apparently in good condition. His wife soon went into the kitchen to set the gas cooker alight for some hot water. In a few minutes, tea was served in splendid cups taken from a set installed in a cupboard. On the cupboard was a radio covered with a piece of cloth to keep it away from dust. Kamal’s children did not want tea like us but preferred cold drinks from the refrigerator. After finishing the interview, I asked for the toilet which I found had flush facilities. Near to the toilet stood a washing machine — thanks to which Kamal’s wife could save much labour in washing clothes of her nine children. Just before I said ‘banyak terima kasih’ (many thanks) to the hosts, I had a final glimpse into the house corners and was attracted by a dark object — a sewing machine. For the consumer goods I saw in Kamal’s house, the change was indeed very substantial.

In comparison, Jusof was less fortunate than Kamal. Previously as a fisherman, he rode a bicycle around the village, as did his wife to the market place with a second bicycle. But that was all they had as consumer goods. Cooking was by firewood purchased from a grocery shop nearby. It had been six years since they migrated. Yet, when I saw his resettled house in Ciku, I realised that little had changed — hardly any improvement on the house and two bicycles were leaning against it. Inside the house, there was little furniture. Decorations of the house were obviously far inferior in quality to Kamal’s. They had, however, a motorcycle needed for commuting to work. For cooking, they still used firewood.
From the above data and observations, we can conclude that the variations in settlers' assets indicate proportional progress in living standards in each area, with Bandar Tun Razak settlers generally better off. The progress could be greater still because assets declared by some settlers before the move were believed to have been overstated — by claiming their parents' assets as their own. The rise in motorcycle ownership was the most spectacular feature but it was highly work-related. Thus, it can be asserted that settlers were inclined increasingly to use mechanised vehicles for their main and supplementary jobs, symptomatic of both higher income and higher expenses. Thus, a new pattern of consumption of consumer goods has emerged in the light of improved income levels and purchasing power. Their transition from semi-subsistence agriculture to a more monetised existence, integrated more into the national and international economies, has been marked — a feature also suggested by a change in occupations.

5. CHANGE IN OCCUPATIONAL STRUCTURE

Earlier sections of this chapter established, by reference to the indices of real incomes, expenditure patterns and assets, a strong case for higher incomes with resettlement. Attention is shifted to the second reason for moving — the search for stable employment. To do so, we compare occupational structures before and after moving. In particular, we note not only the change in primary incomes but also new patterns of secondary work and opportunities for the household as a whole.

Occupations in the Place of Origin

Settlers' previous occupations were fundamentally associated with Malaysia's traditional agricultural sector (Lim, 1977; Courtenay, 1988). These low productivity activities involved subsistence food cropping and other low income occupations characteristic of rural areas and small towns.
The occupational structure of settlers before they migrated is given in Table 5.6. Here, the most outstanding general feature is the highly diversified nature of employment. The types of occupation covered farming, non-skilled to skilled labouring, government service and petty trades – the most common occupations in rural West Malaysia. A relatively high proportion of settlers depended on land for their primary source of livelihood. In this respect, there were more rice farmers, rubber tappers and other farm workers among those who settled in Bandar Tun Razak (64 per cent) than among those who moved to Ciku (35 per cent). Indeed, due to the uneconomic size of rice farms, a large proportion of Ciku settlers adopted a different strategy. Non-farm activities constituted their chief occupations with rice growing and rubber tapping providing a secondary income and subsistence food (see Table 5.7). Among those classified as farm workers, most from Bandar Tun Razak were previously employed on estates whereas, in Ciku, almost half were self-employed tobacco planters.

Besides occupations attached directly to land, about one-third of Bandar Tun Razak and one half of Ciku settlers were construction workers, fishermen, drivers and skilled or semi-skilled workers. There were many construction workers and carpenters among Ciku settlers due to the 'housing boom' in the early 1980s, a time when they joined the FELDA scheme. Given the concentration of recruitment in North Kelantan including the coastal villages, Ciku had more ex-fishermen than Bandar Tun Razak. In addition, skilled or semi-skilled workers made up quite a high proportion in both areas comprising skilled handicraft workers, batik painters, car or motorcycle mechanics, sawmill operators and log graders. While there was no ex-military and police personnel in Bandar Tun Razak, there were five from Ciku recruited either after their retirement or resignation. They joined for two main reasons. First, they were given priority in Kelantan to participate and no formal age limit was imposed on them. Second, seeking other job alternatives after resignation and retirement appeared more difficult than their colleagues from other richer states. Obviously, if settlers' previous occupations were
Table 5.6
Settlers' Main Occupational Structure Before Moving

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Bandar Tun Razak</th>
<th>Ciku</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage of</td>
<td></td>
</tr>
<tr>
<td>Farm-Related</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice Farmer</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>Rubber Tapper</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>Other Farm Worker</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Non-Farm Related</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Worker / Carpenter</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>Fishing</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Driver (Vehicle/Trishaw)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Small Trader</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Office/Field Clerk</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Military/Police</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Skilled /Semi-Skilled Worker</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Fieldwork.

characterised by great diversity, and more Bandar Tun Razak settlers were involved with land than their Ciku counterparts, it must be the nature of the new occupational structure that has contributed to their rise in income levels.

Primary Occupations After Moving

Settlers performed almost identical tasks after moving to the two schemes but their income levels differed. The differentials were largely a result of developmental stages which determine settlers' status whether they were or not 'block members'. A 'block member' enjoyed not only higher income but greater freedom to work. Basically, there are two developmental stages. Stage 1 starts when settlers move into the FELDA oil palm
scheme to do field maintenance (leaf pruning, weeding, fertilising etc) and also do small-scale harvesting within their individual 4-hectare plots. During this stage of three to four years, settlers are paid daily subsistence wages until the yield reaches maturity where the 'block system' will be introduced.

The second stage begins with the 'block system' when the yield becomes steady. The system is organised by the Scheme Manager to group twenty to twenty-five settlers into a block, with a working size of 80 to 100 hectares. A supervisor is assigned to each specific block by the Manager to direct members to do the harvesting, fertilising, field maintenance and other routine checks within their individual plots. The supervisor is assisted by a 'block leader' elected by members who pay him a monthly allowance for the service. All settlers within specific blocks have common responsibility and are required to carry out work as planned. Consequently, an individual settler gets his monthly income by sharing the yield produced within the block, after deduction of operating and maintenance costs. As the yield differs from block to block and varies also with the age of the oil palm trees, it is clear that settlers receive a wide range of income. Not only does the settlers' principal income from the 4-hectare oil palm area vary from stage to stage but their overall household income is further influenced by the availability of secondary occupations. Hence, we now examine how secondary jobs at settlers' place of origin changed after moving to the frontier areas.

Settlers' Secondary Jobs Before and After

Secondary jobs play an important role in settlers' economic life and their availability is directly associated with many factors. External factors depend essentially on job opportunities outside the settlement so that settlers or their wives and children can obtain work there within easy reach. An ongoing public project near the settlement, for instance, can create employment opportunities for some settlers at least for a fixed period. Conversely, internal factors are a result of the developmental stage within the settlement. Higher income naturally leads to higher consumption and creates demand for more grocery shops, petty trading, motoroye workshops and other services.
Table 5.7 provides a comparison of secondary job opportunities for settlers of both areas in their place of origin and present settlements. Primarily small farmers, the great majority of settlers found themselves with time left for secondary jobs both before and after migrating. The table shows that, before the move, many settlers were dependent on subsistence farming as a secondary occupation. Since shifting, they have leaned more towards cash earning, in particular by involving themselves in small businesses, labouring and contract jobs available in the new frontiers. Following the move, settlers of both areas have acquired a wider range of secondary employment opportunities. Indeed, Bandar Tun Razak settlers doubled their income from this source but their Ciku counterparts made only slight progress. The difference between the two sets of settlers stemmed from the fact that Pahang Tenggara was developed earlier and on a much larger scale than the Kesedar region. Consequently, a more diversified local economy has evolved. Also, more settlers from Bandar Tun Razak have found secondary jobs in fruit loading, harvest and maintenance because there were private estates nearby and more settlers busy with secondary occupations. Consequently, the need for wage labourers was created. By contrast, most Ciku settlers engaged in cash crop farming merely grew small quantities of vegetables, sugar cane, and bananas chiefly for their own consumption. Little was sold for cash. Bandar Tun Razak settlers' higher income also enabled them to have more small business enterprises and opportunities to renovate their houses. Generally, a Bandar Tun Razak settler with a secondary job earned a mean monthly income of 60 per cent higher than his Ciku counterpart.

Fish and Cattle Raising

Supplementary to secondary jobs mentioned above, FELDA also encouraged the settlers to participate in other off-farm activities. The activities highly recommended by FELDA were fish and cattle raising. At the time of survey, a small number of fish ponds had been dug by enterprising settlers in both Bandar Tun Razak and Ciku. These ponds were usually located in low-lying areas considered unsuitable for houselots. As fish rearing has just been started there, it is premature to make any observations. Cattle
### Table 5.7
Settlers' Secondary Jobs Before and After Moving

<table>
<thead>
<tr>
<th>Type of Job</th>
<th>Percentage of Households Before</th>
<th>Percentage of Households Before</th>
<th>Percentage of Households After</th>
<th>Percentage of Households After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm-Related</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice Growing</td>
<td>4.0</td>
<td>23.0</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Rubber Tapping</td>
<td>2.0</td>
<td>5.0</td>
<td>2.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Field Loading/ Harvest/ Maintenance</td>
<td>4.0</td>
<td>23.0</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Cash Crop Farming</td>
<td>6.0</td>
<td>5.0</td>
<td>8.0</td>
<td>13.0</td>
</tr>
<tr>
<td>Livestock/Fish Rearing</td>
<td>4.0</td>
<td>23.0</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Other Farm Work</td>
<td>3.0</td>
<td>23.0</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Non-Farm Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor</td>
<td>3.0</td>
<td>23.0</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Grocery Shop/ Other Small Businesses</td>
<td>1.0</td>
<td>23.0</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Sea Fishing</td>
<td>3.0</td>
<td>23.0</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Car/Motorbike Mechanic</td>
<td>6.0</td>
<td>23.0</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Construction/Carpenter</td>
<td>3.0</td>
<td>23.0</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Other Services/ Labouring Work</td>
<td>2.0</td>
<td>23.0</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Total</td>
<td>32.0</td>
<td>68.0</td>
<td>40.0</td>
<td>45.0</td>
</tr>
<tr>
<td>Average Monthly Income ($)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per Household Involved</td>
<td>91.3</td>
<td>234.8</td>
<td>43.9</td>
<td>142.8</td>
</tr>
</tbody>
</table>

Note: As these figures depend upon the memory recall of settlers, they may not be reliable.

Source: Fieldwork.

raising, however, has produced some encouraging results. Under FELDA's 'Cattle Integration Project' (Projek Integrasi Ternakan Lembu), settlers had been able to use their savings to invest in raising cattle. They were closely involved in the operations of the project and took regular turns in minding the cattle. In 1987, the project in Bandar Tun
Razak (Keratong 5) had 356 head of cattle—worth about $160,000. In contrast, the scale was much smaller in Ciku where the project, started only in 1987, embraced merely fewer members and cattle.

The general transformation of the economic life of settlers is reflected in Table 5.7. Before moving, about 70 and 90 per cent of Bandar Tun Razak and Ciku settlers respectively had land-based secondary jobs. After migration, the number of settlers from both areas engaged in land-based secondary jobs dropped to about 50 per cent—a reflection of increasing importance of non-farm jobs which allowed settlers to earn more cash. Contrary to Omar Din's (1981:47) suggestion, settlers' average subsidiary income increased as their main income source rose; they worked more, not less. Thus, our field survey shows that settlers' secondary incomes depend upon the availability of regional jobs and the developmental stages that determine settlers' income levels. As observed in Bandar Tun Razak, settlers higher income levels raise their consumption, creating greater demand in areas where there is not usually a pool of labour available or a well-developed retailing infrastructure. Hence, increased incomes seem to have a strong multiplier effect on the settler economy.

The change in residence has led Kamal and Jusof to a more stable life and employment. When Kamal was tapping rubber previously in Rompin, he worked occasionally as a labourer and took any offer that came along. Now in the frontier settlement, he has been elected block leader which exempts him from the harvesting and field maintenance tasks which were, instead, assumed by other members of the working team. In this position, Kamal's main responsibility has been to ensure good working relationship among members and to liaise with the FELDA management regarding implementation of field tasks. He has to attend a monthly meeting convened by the General Manager who gives him direct instructions. With the FELDA supervisor, he has had to solve all problems within the block such as family quarrels and neglect of field maintenance—both requiring his power of persuasion. He now works about fifteen days a month and some eight hours a day. When free of obligations, he sometimes helps
others with their harvesting. Likewise, Jusof is glad to end his fishing career which he considers highly unstable because of the Northeast Monsoon and irregular catches. Now in Ciku, he does maintenance and harvesting work. Subsidiary jobs are rarer there but he has one as a cleaner. This has relieved him, however, of some financial burden to support his sons' education. As noted earlier, men have been more active in earning household income than women. Nevertheless, we need to know the type of occupations in which women have participated.

**Women’s Occupations Before and After Moving**

Before the move, both Kamal and Jusof’s wives were engaged in home duties. This has remained unchanged since they arrived at the FELDA scheme. How typical is this of other women? We seek to answer this question by examining other examples of employment for women. As stated, settlers' wives generally contributed little to the household income before and after they migrated. In the place of origin, their jobs were predominantly rubber tapping, rice farming and petty trading. If they were rubber tappers, they made the same income as their husbands, though generally they were paid less than men in most other rural occupations. After resettlement, however, there were fewer opportunities because the heavy harvesting tasks and maintaining a 4-hectare plot of oil palm were not perceived as jobs for women. They were handled by a single male worker without need for extra help. Consequently, contributions by women to household income have declined. Their involvement in both Bandar Tun Razak and Ciku has been minimal. Indeed, few women helped their husbands in the field. As a source of supplementary income, tailoring provided them with the best opportunity by working at home. Other sources of income, however, were limited. Thus, moving to the frontiers has disadvantaged most women in terms of income-earning capacity.

Therefore, improvement in the income of settlers has been marked by a change in occupational structure, with enhanced secondary job opportunities. Not only has their higher income brought about other supplementary off-farm jobs but the nature of their jobs has changed commensurate with the shift from near-subsistence to cash-earning
activities. Before moving, the settlers' primary occupations had been diverse, mostly low-paid and often insecure. In contrast, their new FELDA job was relatively stable. Women, however, had become less involved in income earning than before. Also, the overall improvement of household income has to be partly attributed to the change in land size. A salient feature was the settlers' attachment to small parcels of land before migrating—an issue that is now considered.

6. LAND

Land is the key resource for the Malay peasantry and access to land is needed to grow crops for subsistence or sale. Security of tenure to adequate agricultural land is the basic determinant of household well-being. Thus, while land shortage was not accorded high priority in settlers' motives for moving, land lies behind most of their stated reasons: better incomes, greater stability and a better future for their children. In this section, we will examine the land holding of settlers before moving and then see how this changed on the frontier.

Land Holding Before Moving

Most of the settlers were under 35 years of age and their parents were still alive when they joined the resettlement schemes. When interviewed, many settlers who lived with their parents claimed to own land, which, in reality, was registered under their parents' names. In legal terms, their parents owned almost all the land, with plot size ranging from 0.1 to 10 hectares (Table 5.8).

The size of land owned by settlers and their parents was indeed small, measuring mostly less than 1 hectare, especially for Ciku settlers. Yet, more than 90 per cent of this land belonged to settlers' parents. Although largely attached to the land, the average holding was negligible, with 0.1 and 0.03 hectare respectively in Bandar Tun Razak and Ciku. Furthermore, 28 and 18 per cent of settlers of Bandar Tun Razak and Ciku respectively did not possess any land at all. Given this level of landlessness and coupled
with most land being owned by their parents, it is safe to conclude that the settlers were basically drawn from among Malaysia's rural landless population. They worked mainly as tenant farmers or wage earners in generally disadvantaged zones of the country. On their parents' holdings they grew mainly rice, rubber and fruit trees (especially durian). Livestock which were kept in small numbers by settlers before they moved consisted of two categories: cows and buffalos as draught animals while chickens and ducks were nearly all for home consumption.

Table 5.8

Distribution of Settlers' Land Size Before Moving to Bandar Tun Razak and Ciku

| Range (ha) | Bandar Tun Razak | | Ciku | |
|------------|------------------|------------------|------------------|
|            | Total Owned By Settler | Owned By Settler's Parents | Total Owned By Settler | Owned By Settler's Parents |
| 0          | 28 (%)           | 18 (%)           | 18 (%)           | 18 (%)           |
| 0.1-0.9    | 18 (3)           | 15 (50)          | 59 (9)           | 59 (50)          |
| 1.0-1.9    | 24 (4)           | 20 (10)          | 10 (10)          | 10 (10)          |
| 2.0-2.9    | 12 (2)           | 10 (10)          | 10 (10)          | 10 (10)          |
| 3.0-4.9    | 16 (16)          | 1 (1)            | 1 (1)            | 1 (1)            |
| 5.0-10.0   | 2 (2)            | 2 (2)            | 2 (2)            | 2 (2)            |
| Total (%)  | 100 (6.7)        | 93.3 (%)         | 100 (3.3)        | 96.7 (%)         |

Total Area (ha) 144.3 9.6 134.7 77.2 2.6 74.6

Average Size per Household 1.44 0.10 1.35 0.77 0.03 0.75

Source: Fieldwork.

New FELDA Holdings

On moving to a FELDA scheme, settlers received a houselot of 0.1 hectare for their house and home garden, in addition to their 4-hectare oil palm holding. A common complaint made by settlers was that their houselot was too small for fruit trees. The oil
palm holding represented a substantial improvement in the size of land held but settlers’ satisfaction with this has been affected by recent repercussions over the land title dispute in Johor. Apparently for the settlers, there remained a risk that FELDA land would be used as a collective means of production rather than as private property. This in fact has already been manifested in the introduction of the ‘share system’ by which settlers recruited since 1985 would no longer hold any individual titles. On 30 October 1988, under immense pressure from settlers, the Deputy Prime Minister, Ghafar Baba, declared to abolish the ‘share system’ and resume all individual ownership of land to settlers so as to motivate them to work on land that they see as their own (FEER, 24 November 1988). This decision had retained the hope of settlers to hold land as their primary asset for daily production.

For Kamal and Jusof, their experience of change in land holding had been dramatic. As a rubber tapper on his father’s 4-hectare holding, Kamal previously possessed no land of his own. Moreover, at his father’s death, he would only inherit part of it as he had many other brothers and sisters. Now in the FELDA scheme, he was entitled to own all 4-hectares by himself after he repaid the loan. Jusof had an entirely different life from Kamal before coming to Ciku, he derived his livelihood from the sea instead of land. The potential of land ownership was not only a new experience for him but represented also stability of livelihood with solid ground below his feet.

Our field investigation indicates that, though highly dependent on land for their livelihood in the place of origin, settlers’ mean land size was 0.1 hectare or less.

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5 In September 1987, a group of FELDA settlers in Kulai District, Johor demonstrated to demand free land title since they had all repaid their loans as was expected under terms of the FELDA agreement. They also demanded that they be freely allowed to manage their own holdings without FELDA’s interference.

6 The ‘share system’ aims at overcoming the ‘equity’ problems of the ‘block system’ in two major ways. First, it applies the principle of ‘more work more pay’. By this principle, it requires each settler to work on the basis of 4 hectares in a work team. Under this arrangement, an individual settler is more fully employed. The second objective is to protect settlers from drastic price fluctuations. With a guaranteed wage, settlers can at least be assured that their income would be able to cover the expenses for basic needs.
Landlessness and possession of tiny plots of land were an important reason for their poverty. After the move, settlers' land holding has expanded to 4 hectares of highly productive oil palm which has bolstered their income. They had, however, a common complaint over the new houselot dimension which was too small for traditionally grown fruit trees. Despite considerable improvement in income, assets and land size as discussed above, settlers' improved real income has been constantly undermined by marked fluctuation of palm oil price. This is the recurrent nightmare, suggesting an underlying fragility to their improved standards of living.

7. FRAGILITY OF SETTLERS' IMPROVED STANDARDS OF LIVING

We have seen how settlers have become better off: higher incomes, more assets and land and security of employment. There is a need, however, to consider whether these improvements can be sustained. Do they represent a real, secure and sustainable progress or merely a fortuitous set of circumstances in the early stages of resettlement? In contemplating this question, we have to turn from the household survey data to consider broader implications: mainly the financial relationship between settlers and FELDA; and the world palm oil price.

FELDA's Operations and Fixed Costs

FELDA is a semi-state corporation which consists of three divisions, namely the land development schemes, business corporations and joint-venture companies. In 1986, the whole network employed 21,670 people (FELDA, 1986:7). Within the whole FELDA business chain, the range of services is widespread (Figure 5.3). It encompasses functions such as trading, marketing, transport, processing mills, refinery, palm kernel processing, security services, agricultural and maintenance services and construction of premises and sites. Within this complex network, settlers are managed by the land development division comprising management and training staff at different levels. The land development scheme is part of an integrated physical distribution system linking raw material production by settlers in the plantation and transportation of fresh fruit bunches.
Figure 5.3: Range of FELDA's Services in Peninsular Malaysia

by settlers' cooperatives to the processing mill. From the mill, the crude palm oil is further carried by FELDA's fleet of truck-tankers to local seaports for direct export and local reprocessing (less than 15 per cent). The fixed costs of operations directly affecting settlers comprise fertilisers, transport of fruit bunches from field to factory, field surveillance, some specific maintenance and general insurance. They have tended to increase in real terms over time and are passed on to the settlers since pay-outs are only made after these charges are deducted. All these costs can be taken as a constant variable, independent of the price levels of palm oil. This variable is pitched at a relatively high level because of the extensiveness of FELDA's network and bureaucracy. It is the settlers who bear price fluctuations and support the FELDA structure – they are bound to this financial arrangement and can do little to cushion themselves from price variations or mounting FELDA costs. As the fluctuation of palm oil price can be very marked, the variability is reflected in differences in the income of settlers. Thus, the settlers' improved living standards is fragile when the commodity price declines.

FELDA's substantial maintenance costs have been a perpetual source of complaint by settlers in recent years. As noted, in 1987, their frustration resulted in an open demonstration in Johor. Nevertheless, any detachment from FELDA at this stage would leave many settlers lost because they have been dependent on it for guidance since 1956. Further, despite their unstable source of primary income, they have enjoyed a secure financial position under FELDA's protection. It has guaranteed settlers a minimum subsistence income of $350 through extra-loan arrangements free of interest. This guarantee was provided in 1986 when prices declined sharply. In compensation for this assistance, the settlers have had to prolong their loan repayment period beyond the normal fifteen year period. Yet, this enhanced loan arrangement merely acts to postpone the impact of financial pressure. Settlers may be better off economically but their relation with FELDA is one that ensures their continued dependence to that organisation and vulnerability to outside forces.
Price Fluctuation

The improved standards of living of the settlers can only be maintained when the palm oil price is high. Palm oil prices, however, have proved extremely volatile. Figure 5.4 shows the price fluctuations of palm oil between 1970 and 1986. The price fluctuations were often extreme and these reflected the pay-packets of the settlers clearly.

Indeed, for an individual settler, the unstable income is illustrated in Figure 5.5 which shows that a settler's mean monthly income fell sharply from $1,295 in 1984 to $368 in 1986. In 1986, about half of this Bandar Tun Razak settler's gross income as reported in his tax return was used for loan repayment, replanting fund, management and maintenance costs. Consequently, this settler received only half of it as net income. This instability of price levels is clearly a recurrent dilemma as the pivotal control is determined by external demand rather than by the producers themselves. As a result, it is impossible to predict the growth of the settlers' annual income.

Figure 5.4: Price Fluctuations of Palm Oil, 1970-86

Source: Munsoor and Barlow, 1988: Figure 1.1
Figure 5.5

Unstable Income of A Bandar Tun Razak Settler

--- Absolute Income --- Real Income

Thus, the settlers have a dual relationship with the 'paternalistic' FELDA organisation. They have been 'delivered' by FELDA out of mere subsistence farmers or lowly paid wage-earners. Without any need for initial capital, they have become capable of achieving higher cash income within a relatively short period. Their subsistence is further guaranteed in case of any marked decline in commodity prices. On the other hand, a substantial part of their gross income is used for maintaining the costly FELDA set-up and bureaucracy on which they have become dependent. On top of this variable of high fixed cost is the drastic fluctuation of commodity prices, making the improved living standards of settlers fragile at times. Economic stability remains elusive.

Resume

This Chapter has examined whether settlers were better off after they moved to two FELDA schemes – Bandar Tun Razak and Ciku. The results show that most settlers enjoyed higher income levels after migrating – a result that corresponded well with their main motive for moving. This was more significant for Bandar Tun Razak settlers than their Ciku counterparts largely because the former area was established for a longer period. In the shift, settlers had abandoned subsistence farming and become more involved in the cash economy, including off-farm secondary jobs. The availability of secondary jobs was related to settlers' consumption capacity and opportunities provided by existing projects in the area – a result of multiplier effects. Bandar Tun Razak was more privileged in this aspect. The shift had also benefited men rather than women. The latter saw their income-earning ability evaporate – the heavy tasks on the oil palm estates were deemed unsuitable for women.

The substantial real improvement in income has been accompanied by more assets, employment stability and land holding. The achievement has been even greater when we consider block members who have started to repay loans for the 4-hectare plot and the houselot which they will eventually own. They have been the privileged among Malaysia’s rural households. Nevertheless, this has not been as marked as may appear because it was offset to some degree by bearing additional living costs. More than half of
their income was absorbed on basic needs, suggesting that the real improvement was smaller than the income statistical figures have indicated. Although household assets increased in both areas, the most noticeable change was the possession of a work-related motorcycle.

Hence, the findings agree with the argument by Bahrain and Parera (1977), MacAndrews (1978), Peacock (1979), Blair and M. Noor (1978), Chan and Lim (1981) and Omar Din (1981) – there has been an overall improvement in settlers’ living standards. But this view has not been conclusive because of the problems of increased costs and uncertainty due to fluctuations in commodity prices. Thus, the suspicion of Baharuddin (1979) and Robertson (1984) over the sustainability has been confirmed. Indeed, the settlers' improved living standards can only be sustained by high commodity prices and higher material standards of living cannot be assured and are fragile at times. Consequently, the sustainability of the settlement for the second generation of settlers is called into question – a matter taken up in the next chapter.
CHAPTER 6

SETTLERS' EXPERIENCE: THE SOCIAL ASPECTS

We have shown that the settlers have achieved higher material standards of living after resettling in Bandar Tun Razak and Ciku. This improvement has been accompanied by new consumption-oriented expenditure patterns, more household assets, an increasingly monetised economy and a larger land holding size. The progress, however, is constantly undermined by marked fluctuations of commodity price and, therefore, results in a fragile economic base. This economic perspective does not provide a complete view of settlers' experiences on the frontier. Thus, we need to further assess the social aspects of the settlers' living standards by examining their response and reactions. This involves not only the long-term interest of settlers but also that of the politicians and planners. The acid test is whether the improvements are sufficient to persuade the second generation to stay on the frontier.

Before we can discuss this issue, we need to answer a series of basic questions. Initially, we have to know if there has been any improvement in the social lot of settlers from their place of origin to the resettled areas. As the judgement of settlers forms the basis of our approach, we have to question: how do settlers perceive the evolution in their social life and environment? Given, however, the varied nature of social change, we need to isolate different aspects that are recognisable to the settlers. These aspects include: how has the quality of housing changed; how has local access to public goods (schools, health and religious facilities) been transformed; how have educational opportunities altered; and finally, how has regional access to higher-level goods and services developed on the frontier? After examining these issues, we can address the overriding issue: will the second generation stay?
In considering these questions, we draw upon field data and the surveys conducted on one hundred settler households each in Bandar Tun Razak and Ciku and undertake a comparative study. Initially, we seek a basic understanding of how social facilities have changed by analysing the settlers' perception of change between the place of origin and the frontier (section 1). Once this broad perspective has been established, we focus on detailed change in individual issues by looking first at housing (section 2). This is followed by an investigation of alterations in local access to public goods (section 3), the development of regional access to higher-level goods and services (section 4) and lastly, the change in educational opportunities (section 5). With this background, we can consider whether the second generation will stay on in the frontier (section 6). Again, as a means to escape the 'dry bones' of field surveys, we interlace the text with household case studies. On this occasion, we leave the Kamal and Jusof families and draw upon the whole spectrum of households (rich and poor) to illustrate each section.

1. PERCEPTION OF SOCIAL CHANGE

In this section, attention is focused on changes in social facilities and services before and after the settlers moved to gauge the effect of state efforts and self-improvement. Much, of course, depends upon the mental outlook of settlers. This outlook is strongly influenced by their past experience and degree of exposure to the outside world. The latter aspect provides them with varied criteria for judgement. Because of the exposure, the settlers' judgement of change does not solely rely on the quality variation of an observed object. Instead, their perceptions become more complex. Thus, in assessing their perception of change, attention is concentrated on the issues that settlers consider to be the most important. In response, we have grouped five issues which the settlers were most concerned about in their daily life: income, housing, local access to public goods and services, education, and regional access to higher-level goods and services.
An examination of the individual issues in Table 6.1 has shown marked variations. The general consensus in both Bandar Tun Razak and Ciku was that housing conditions were better. There was, however, a marked divergence in access to social facilities and marketing in both settlements. In education, there was no sharp difference between Bandar Tun Razak and Ciku. Their perception came together again in access to regional facilities. The reasons for their similarities and divergences remain to be explored by explaining each issue in turn.

Table 6.1

<table>
<thead>
<tr>
<th>Perception</th>
<th>Much Better</th>
<th>Slightly Better</th>
<th>About the Same</th>
<th>Little Worse</th>
<th>Much Worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Total 100%)</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Housing</td>
<td>A 3.0</td>
<td>68.0</td>
<td>17.0</td>
<td>12.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>B 3.0</td>
<td>73.0</td>
<td>8.0</td>
<td>16.0</td>
<td>-</td>
</tr>
<tr>
<td>Local Access</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Facilities</td>
<td>A 4.0</td>
<td>72.0</td>
<td>16.0</td>
<td>8.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>B 3.0</td>
<td>79.0</td>
<td>14.0</td>
<td>4.0</td>
<td>-</td>
</tr>
<tr>
<td>Marketing</td>
<td>A -</td>
<td>34.0</td>
<td>37.0</td>
<td>29.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>B 1.0</td>
<td>23.0</td>
<td>29.0</td>
<td>47.0</td>
<td>-</td>
</tr>
<tr>
<td>Education</td>
<td>A 11.0</td>
<td>67.0</td>
<td>19.0</td>
<td>3.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>B -</td>
<td>43.0</td>
<td>12.0</td>
<td>45.0</td>
<td>-</td>
</tr>
<tr>
<td>Regional Access</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>A 8.0</td>
<td>53.0</td>
<td>17.0</td>
<td>22.0</td>
<td>-</td>
</tr>
<tr>
<td>Transport</td>
<td>B 2.0</td>
<td>47.0</td>
<td>19.0</td>
<td>32.0</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: A = Bandar Tun Razak, B = Ciku.

Source: Fieldwork.

2. HOUSING

The traditional rural wooden housing in Malaysia has served generally more as shelter than as a symbol of wealth. This conception, however, has changed since the
Second World War as houses have been built increasingly based on Western models. This trend has been initially reinforced in urban areas by the emphasis of local and foreign trained architects on concrete designs equipped with modern facilities. These designs spread to the rural areas following income improvements. Consequently, many rural houses display not only better, less cramped and healthier living conditions but also manifestations of differences in wealth. As noted in Table 6.1, about 70 percent of settlers in both Bandar Tun Razak and Ciku claimed to be more satisfied with the housing after their move. To ascertain the reasons for this satisfaction, we need to ask: how has the settlers' housing quality altered; and how has their house ownership status changed? In answering these questions, we examine the alterations of house types and household amenity, and ownership status of the settlers before and after the move.

Change in House Types

On arrival, a FELDA settler is allocated a standard one-room traditional kampung house built on pillars with wooden walls and a roofing with galvanised zinc or asbestos. Most settlers were familiar with this type of house before they moved to the frontier. Indeed, the traditional atap roof, made of coconut leaves, was still quite popular, particularly in Ciku (Table 6.2). Houses built with brick wall and tiled roof were more costly and were rare among settlers originating in Bandar Tun Razak. None were reported in Ciku. On average, Ciku settlers lived in much older houses, most of which were in a poor state compared with those lived in by their Bandar Tun Razak counterparts.

After the shift, there has been a marked difference in the change in house types between settlers of Bandar Tun Razak and Ciku. The transformation for Bandar Tun Razak settlers was more dramatic – most of them seemed to have moved out of a wooden country house and shifted into a more substantial dwelling. In sharp contrast, Ciku seemed to have inherited a typical rural habitat from North Kelantan. Indeed, with higher income, settlers of Bandar Tun Razak had generally made substantial improvements between 1982 and 1985. They had spent an average of $3,170 per household on
renovations compared with $195 in Ciku. During 1984 in particular, eight settlers in Bandar Tun Razak used up to $10,000 to enlarge their houses but in Ciku, the largest amount spent on renovation came from a settler who used $3,500 in 1987. Yet, this Ciku settler would not have been able to do so without the help of his two working children.

Table 6.2

House Types of Settlers Before Moving

<table>
<thead>
<tr>
<th>House Type</th>
<th>Bandar Tun Razak</th>
<th>Ciku</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wooden Wall + 'Atap' Roof(^a)</td>
<td>25.0</td>
<td>20.0(^b)</td>
</tr>
<tr>
<td>Wooden Wall + Zinc/Asbestos Roof</td>
<td>67.0</td>
<td>79.0(^c)</td>
</tr>
<tr>
<td>Brick Wall + Zinc/Asbestos Roof</td>
<td>2.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Brick Wall + Tiled Roof</td>
<td>6.0(^d)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

| Average Age of House (Years)        | (13.2)           | (25.8) |

Note:  
\(^a\) made of coconut leaves.  
\(^b\) including bamboo roof.  
\(^c\) including tiled roof.  
\(^d\) including one having wall built with rocks.

Source: Fieldwork.

From my observations in Bandar Tun Razak, the great majority of settlers adopted an almost identical approach in house renovation. They usually maintained the front part of the original house which was constructed on pillars and extended the rear part (attached to ground) to the size they wanted. In this extended portion, sand bricks were usually used for building a wall up to about a metre high, above which wood planks were added to the height of a normal house wall. The roof was mostly covered by asbestos sheets. A small number of 'successful' settlers even pulled down the whole
original house and rebuilt on the spot a one-storey brick house similar to that commonly found in an urban area.

In Ciku, most house improvements, if undertaken, were minor. The most significant alterations were made by a few settlers running grocery and coffee shops. To suit the need of the business, the whole original facade constructed on pillars was removed so that the floor could be established at ground level. The floor, however, was not cemented because of the lack of spare cash.

The contrast in housing improvement between Bandar Tun Razak and Ciku can be portrayed by a case study of two settler households. Appokountan Subramaniam was formerly a rubber tapper living in a wooden estate house. Having been successful as a contractor in transporting palm fruit bunches to a processing mill for a plantation owned by the Pahang State Development Board (Lembaga Kemajuan Negeri Pahang), he spent more than $10,000 in 1984 to renovate his house. It now looks like an urban middle-class dwelling with a car porch, a concrete wall, a spacious kitchen and four bedroom.

A Ciku counterpart, Che Min bin Ismail, had lived previously in an atap dwelling in a kampung near Kota Baru. Seven years after shifting to Ciku, he has not done much to the original house. In 1984, he paid $30 for some planks and zinc plates left over by a friend and used them to upgrade the kitchen. That was all he could afford to do.

Another factor linked to the settlers' perception of change in house quality is the supply of household amenities. The two most important elements are lighting and water supplies. In fact, electricity and piped water were not common in the settlers' place of origin. As shown in Table 6.3, about 60 per cent of settlers of Bandar Tun Razak and Ciku used kerosene or 'pressure' lamps before they shifted. After the move, all settlers in Bandar Tun Razak enjoyed 24-hour electricity supplies provided by the National Electricity Board whereas settlers of Ciku did not yet have electricity supplies. Similarly, Bandar Tun Razak settlers were privileged with water supplies. Indeed, even before the move, 42 per cent of settlers of Bandar Tun Razak had piped water supplies compared to
only 8 per cent from Ciku. As many as 87 per cent of Ciku settlers consumed well water in their place of origin as against about half for their counterparts in Bandar Tun Razak. After the move, all settlers in Bandar Tun Razak enjoyed piped water, but some three-quarters of Ciku settlers still used well water while the rest consumed river water.

Table 6.3

Source of Lighting Before and After Moving

<table>
<thead>
<tr>
<th>Source of Lighting</th>
<th>Bandar Tun Razak Before</th>
<th>Bandar Tun Razak After</th>
<th>Ciku Before</th>
<th>Ciku After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerosene or Pressure Lamp</td>
<td>63.0 %</td>
<td>-</td>
<td>61.0 %</td>
<td>100.0 %</td>
</tr>
<tr>
<td>Electricity</td>
<td>37.0 %</td>
<td>100.0 %</td>
<td>39.0 %</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 %</td>
<td>100.0 %</td>
<td>100.0 %</td>
<td>100.0 %</td>
</tr>
</tbody>
</table>

Source: Fieldwork.

Again, a contrasting image can be seen with the experiences of Appokountan and Che Min. Before moving, Appokountan had to collect water from a stand-pipe and lit a 'pressure' lamp when night fell. Currently within his house, there is a basin for him to wash his face after work. More conveniently, he can turn on the video anytime to watch tapes loaned from Segamat. Conversely, Che Min has yet to enjoy the advantage of electricity. His house lighting is by two dim kerosene lamps. For daily bathing, the whole family uses the well at the rear of the house.

Besides the change in house quality, the settlers' perception of change also involved ownership. According to the FELDA contract, all settlers are potential house owners once they have repaid the entire loan. If all settlers are assured of possession of a house by FELDA over a fixed period, we need to examine the situation of house ownership before they moved.
House Ownership of Settlers Before Moving

More than half of the settlers were in their late twenties or early thirties when they joined the scheme. By rural tradition, youngsters normally live with parents even after marriage. In general, older settlers would own a house either by inheritance or when they lived away from their place of birth. As shown in Table 6.4, about half of the settlers of Bandar Tun Razak and two-thirds of Ciku settlers lived in their parents' houses before they moved. Because there were more settlers from Bandar Tun Razak who lived away from their place of birth when they joined the scheme, their previous residence was either rented or provided by relatives and employers. For example, Appokountan lived in an estate house provided by his employer. Che Min, however, was a proprietor before migrating as he owned a house. After the move, there is no difference between them. They will both eventually own the 0.1 hectare site on which their house was built.

Thus, the overall data indicate that there has been a marked improvement in the housing of settlers – they have been able to own the roof over their heads (at least after loan repayment). Moving away from their parents' house, many of them have avoided living in extended (and increasing) households. The basic FELDA house is of adequate,

Table 6.4
Housing Ownership Status Before Moving

<table>
<thead>
<tr>
<th>Status</th>
<th>Bandar Tun Razak</th>
<th>Ciku</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owned By Settler</td>
<td>33.0</td>
<td>28.0</td>
</tr>
<tr>
<td>Owned By Settler's Parents</td>
<td>46.0</td>
<td>67.0</td>
</tr>
<tr>
<td>Rented By Settler</td>
<td>10.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Provided By Relatives</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Provided By Employer</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork.

164
if not opulent, quality. On this basis, many settlers, particularly those from Bandar Tun Razak, have been able to extend, renovate and even replace their dwellings of generally higher standard. Nevertheless, for others, especially in Ciku, their new housing was little better or bigger and few could afford to make substantial improvement. Yet, Ciku settlers' satisfaction remained high. This important index of the quality of settlers' living standards has reflected beneficial change on the frontier. The number of settlers who were more satisfied with the change in housing was greater in Ciku than in Bandar Tun Razak. Settlers from the latter area travelled more and had greater exposure to good housing standards outside their settlement. As a result, they tended to be less content than their Ciku counterparts when asked to comment on change in housing quality before and after the move. Housing, however important it is, is only part of settlers' livelihood. Public goods and services are needed to sustain the community life.

3. LOCAL ACCESS TO SOCIAL AND MARKETING SERVICES

Local public goods and services comprise social and marketing facilities. Being most directly related to the need for moral support and the settlers' survival, these facilities are of considerable concern. Although more than three-quarters of settlers in Bandar Tun Razak and Ciku have been happy with social services, there have been mixed feelings about changes in local marketing. Given this divergence, attention is focused initially on social facilities ranging from schooling, religious and health care facilities to social organisation before discussing the marketing system. As an index of measurement, distance is used to reflect the alterations brought about by the shift.

Schooling, Religious and Health Facilities

Access to public goods is assessed by both distance of travel and quality of the service. Shortening travel distance does not imply progress in access unless infrastructural standards have reached a level in which services can be effectively delivered. During the last twenty years, the infrastructure has been extended to provide
basic services for almost all parts of rural West Malaysia. Consequently, we can concentrate on changes in travelling distances brought about by the shift.

Using distance as the criterion to evaluate change, our survey shows that access to local public goods and services has generally improved following the shift (Table 6.5), particularly for Bandar Tun Razak settlers. Without a secondary school, Ciku’s children had to commute to Gua Musang for the service. Consequently, the travel distance has increased by almost five times. The overall improvement is a reflection of FELDA’s physical planning arrangements that have substantially contributed to the reduction of travel distance in the resettled areas. Different from the linear settlement pattern found in the place of origin, the FELDA design provides public goods and services in a central location which, as a whole, are closer to settlers.

Table 6.5
Distance of Facilities From Home Before and After Moving

<table>
<thead>
<tr>
<th>Facility</th>
<th>Bandar Tun Razak</th>
<th>Ciku</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>Primary School</td>
<td>3.0</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td>Secondary School</td>
<td>10.8</td>
<td>&lt;3.0</td>
</tr>
<tr>
<td>Praying House/Mosque</td>
<td>1.8</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td>Nearest Health Centre/Hospital</td>
<td>6.2</td>
<td>&lt;2.5</td>
</tr>
</tbody>
</table>

Source: Fieldwork.

Social services were unevenly distributed in the place of origin, greatly to the disadvantage of scattered settlements. Despite the government’s major efforts to build mosques and to popularise education since 1957, particularly in the rural Malay areas, schools and mosques were non-existent in isolated hamlets – the rice growing and rubber smallholding populations were below the threshold. Consequently, these rural folk had to join the nearest village or towns for the services. For all three services – schooling, religion and health care – the average travel distance was shorter for Ciku settlers.
compared with their Bandar Tun Razak counterparts. The main reason was that Ciku settlers originated from the more densely populated North Kelantan whereas their Bandar Tun Razak settlers came from all rural corners of West Malaysia.

Thus, in the place of origin, those living further away had more difficulty in reaching the services. Hanin bin Abdul Ghani of Bandar Tun Razak came originally from a solitary farm in Pahang. He remembers the years when he used to carry his two older daughters on a bicycle to a school at Kampung Janau, 6 kilometres away. His Ciku counterpart Samsudin bin Mohammad had to ride a bicycle to school 8 kilometres from home when he was a child. Other settlers have mixed experiences in attending Friday prayers. This could be hazardous when it rained for some, such as Abdul Razak bin Aziz. Before shifting to Bandar Tun Razak, he lived 6 kilometres from Kampung Cenderung Balai (Perak) where the nearest mosque was located. Mounting an old and unreliable motorcycle, he had to negotiate the bumpy and tortuous lane between the rice field and the mosque – a risky experience on stormy days. Zakaria bin Yaakob of Ciku, however, was luckier because a mosque was found closer to his home. It took him only five minutes to walk there.

The picture changed dramatically after the move, except for Ciku settlers who badly needed a local secondary school. The mosque was now within walking distance for all settlers. In Bandar Tun Razak, there were five mosques, five primary schools and one secondary school. In Ciku, there was one mosque and one primary school. The religious service was, however, restricted to Muslims who formed 98 per cent of settlers in Bandar Tun Razak and 100 per cent in Ciku. For the 2 per cent or 400 non-Muslims in Bandar Tun Razak, they had no access to religious premises of their own choice. Before they moved, by contrast, they could visit Chinese temples or Hindu shrines near to their home.

Like religious and schooling services, the medical services before moving were also dispersed. Attending a health centre or a hospital was cumbersome. Poh Ah Ha of
Bandar Tun Razak preferred to consult a familiar private clinic when he became ill. But he had to travel 48 kilometres from a private rubber estate to Bentong, a prosperous town in Western Pahang, for the service. The experience of Abdullah bin Mohammad Shah was totally different. As a soldier from Kelantan before coming to Ciku, he just needed to walk into the clinic at the army camp for medical care. After the shift, the medical service has been upgraded for most of Bandar Tun Razak settlers but little as yet for their Ciku counterparts. Indeed, the health care service differed quite significantly between Bandar Tun Razak and Ciku, though free treatment was offered in both places. In Bandar Tun Razak, there was a health care centre equipped adequately with trained staff and supplies but Ciku settlers only had a 'mobile' clinic service once a week from Paloh I, some 10 kilometres to the north. Moreover, each of the five Bandar Tun Razak settlements possessed a midwife whereas Ciku settlers had to seek help from 'traditional' midwives if they chose to deliver locally. The ex-soldier, Abdullah bin Mohammad Shah, however, has been disadvantaged by the shift. When ill, he has to ask a car-owning settler to take him to the Gua Musang Hospital.

For more serious illness, local health care services were inadequate. Settlers in Bandar Tun Razak then had to attend the general hospitals in Segamat, Kuantan and their Ciku counterparts in Gua Musang and Kuala Krai, if not other larger towns where service was better. In addition to the three types of services discussed above, there is another service essential to settlers. This is the FELDA administration itself which has a strongly paternalistic commitment towards the settlers.

Local Social Organisations and Administration

In the place of origin, settlers pursued a great variety of occupations and had an economic life little interfered with by other social organisations. Their life style was dominated by a relatively uncomplicated social structure. The most notable social activity practised within the village community was the traditional gotong royong (mutual assistance). This collective spirit has been used to carry out local projects. Other official social organisations were relatively loose and political involvement was a periodical
event, activated normally by the approach of a general election. After the electoral campaign, social life was again restored to its normal mood and pace. Economic life and social existence were two distinct elements which hardly overlapped.

After the move, a new phenomenon has been induced through FELDA’s introduction of the Scheme Development Authority (Jawatankuasa Kemajuan Rachangan or JKKR). The JKKR has merged settlers' economic production and social code of behaviour into one. Created in 1967 as an institution to allow settlers to have their views reflected at all levels of the hierarchy, the JKKR’s initial objective was primarily to ensure that settlers’ productivity would not be affected by their own problems. Since March 1986, its role has been extended to allow settlers to participate in management and assessment of socio-economic development within individual schemes.

How the JKKR acts as a guardian of settlers’ socio-economic life needs, however, to be explained. Specifically, the JKKR’s operational committee is chaired by the Scheme Manager and 'block leaders' are automatically committee members. Other committee members are recruited locally to include the Penghulu (village head), school headmaster, Imam (religious leader), chief of police and head of local health care centre. The committee has four working bureaus, namely (1) the Field Bureau (Biro Ladang) for field maintenance, harvesting and fruit transportation; (2) the Economic Bureau (Biro Ekonomi) to supervise the operations of the cooperative (where daily supplies are sold by credit to settlers), handicraft and to encourage settlers to invest in commercial and industrial activities; (3) the Education and Training Bureau (Biro Pelajaran dan Latihan) to promote education from pre-school to tertiary level in the scheme; and (4) the Social and Community Bureau (Biro Sosial dan Kemasyarakatan) whose wide range of services extend from donation for the deceased, religious affairs, settlers' general welfare to sports and women’s home science activities.

The JKKR is, however, not independent. It is directly controlled by a regional office (Gabungan JKKR Pembangunan) whose role is to supervise and guide 'settlers'
'ideas' and help solve settlers' problems at the scheme level. Obviously, the hierarchy is linked from the regional level to the federal level as it is the Settler's Consultation Council (Jawatankuasa Perunding Peneroka) at the Headquarters in Kuala Lumpur that formulates the policy for the regional office to follow and henceforth guide the settlers. Indeed, the Council holds a meeting every three months to brief the regional officers on current policy matters and discuss the progress of the socio-economic development as reported by the regional offices. The role of the JKKR is illustrated by reference to Samuri bin Tusimin of Bandar Tun Razak and Meriam binti Saat of Ciku.

Samuri bin Tusimin was not active in any social work in his former little village. Now a 'block leader', he is responsible to the Scheme Manager. He is proud to follow his field supervisor to Muadzam Shah's regional office to attend an annual meeting. There, he is glad to meet those 'big men' from Kuala Lumpur. He listens attentively to what they say and asks his supervisor things he cannot understand. He is confident of doing a good job as he knows his team mates very well. In Ciku, Meriam binti Saat's case represents FELDA's readaptation of the traditional 'gotong royong'. Her husband died in an accident in 1985. She would have quit if without the timely assistance from JKKR's 'Women's Association' (Persatuan Wanita) which gave her moral and material support. Under a special arrangement, she now does only maintenance work in the field while harvesting is done by other male team workers. This relieves her of the heavy tasks and allows her to have more time for her small children. Besides public services provided by the government, the public goods from the private sector also manifest differences between Bandar Tun Razak and Ciku. The most spectacular is the local marketing network.

Local Marketing

In both Bandar Tun Razak and Ciku, business was conducted by local settlers who were given priority to do so. As noted, local market supply was unpopular, particularly among Ciku settlers because of the limited variety and relatively low quality. This
discontent, however, was relieved by mobile traders who came once a week to offer goods of better quality and greater variety.

There were a few reasons behind the settlers' complaints about the supply of local goods. For example, the ex-fishermen or those who came from areas near to big towns such as Kuantan, Alor Setar and Kota Baru where fresh and relatively cheap foodstuffs were available would find that the resettled areas could not offer the same service. In many settlers' place of origin, grocery shops were a common feature, though the stock and variety might be restricted in some remote villages. After migrating, the state of supply has not improved much, though conditions were better in Bandar Tun Razak than in Ciku. Indeed, Ciku settlers' relatively low purchasing power and its isolation discouraged high-quality food supplies from reaching them. Fish is the most important food item besides rice. Yet, good-quality fish landed in Kelantan itself were mostly sold to Singapore and other important national towns to fetch higher prices.

Local supplies of fish and other food declined in quality as the sale penetrated further inland from the coast, with the poorest quality reaching Ciku settlers as one of the last destinations. They were more expensive as it involved additional dealers acting as middle-men. Conversely, the relatively large population of Bandar Tun Razak with higher purchasing power and its proximity to Segamat and Kuala Rompin attracted bigger dealers who obtained direct supplies from the main supplier. Daily supplies varied quite markedly between Bandar Tun Razak and Ciku. There were a row of shoplots in each of the five FELDA settlements in Bandar Tun Razak, supplemented by a central market place in the heart of the township. The various food supplies were basically adequate to meet the demand of the settlers. In contrast, the Ciku settlers had to rely on a few, scattered poorly provisioned grocery shops. Highly specialised in palm oil production, Bandar Tun Razak and Ciku had to import almost all their food from outside, except some fowls, goats and cows and a small amount of vegetables and fruits grown for domestic consumption.
The goods from local shops, and in the case of Bandar Tun Razak a central market, were restricted to mainly food items and some other basic services. So far, no settlers or businessmen from nearby towns had set up business serving higher-quality goods because of the high risk involved. Goods such as garments, general household utensils, and lower-quality durables (watches, radios, electrical appliances) were supplied by the weekly market (Pasar Minggu), held adjacent to the central market. A visit to the Sunday market in Bandar Tun Razak was indeed an unforgettable experience. Starting at around 2 pm, the central market lots specially designed for such purpose are soon filled up by 'mobile' vendors travelling in their vans. Settlers gradually arrive in groups or in families, looking for what they required. Towards evening, the crowd is augmented by the roaring motorcycles and cars. Late-comers have to park their vehicles up the slope further away from the scene. The market activity finally ceases at 9 pm when vendors begin to pack up and call it a day. Indeed, it is a grouping of a few local and other petty traders from various places – Segamat, Kuantan, Temerloh, Telok Intan and Kota Baru who offer goods of slightly higher quality and greater variety than those available locally. The intermediate service provided by incoming traders fills the vacuum between local inferior supplies and higher quality goods available in the regional centres. Thus, settlers need to travel to nearby towns for important consumer items. Among the local traders who join in the Sunday market 'fever', Zainal Abidin is one of the most active. By midday, he has already transferred a large stock from his father's grocery shop to the stand. as he knows this is a big day for business. We had a chat when I walked by one Sunday afternoon, and he said:

'We sell the same things as in the weekdays. But we sell most on Sundays because people are there to buy all sorts of things they see. On good occasions, we can make in one Sunday as much as in three or four weekdays.'

In Ciku, the weekly market is held on Tuesday (Ciku 1) and Saturday (Ciku 2) from 2 to 6 pm. The market scene between the two areas manifests a sharp contrast. The atmosphere here is calm and fewer goods are displayed. Most food items can be found in local shops but are of much better quality. Other settlers' favourites – cheaper quality of
garments and cooking utensils – are also on display. Traders are almost all from the north – Machang, Kuala Krai and Kota Baru. A woman trader selling Kelantan artifacts, however, is a local settler's wife. When asked how her business went, she replied:

'We have extra time after working in the field. So I want to do something. I sell artifacts because I can obtain the supply from a friend in Kota Baru by credit. We use a van to go around this region and we manage to earn five to six ringgit a day.'

In sum, there has been improvement in the access to social services such as religious and health services in the shift for both Bandar Tun Razak and Ciku. In schooling, however, while progress has been made in Bandar Tun Razak, it has been worse off in Ciku. Further, through its social arm – the JKKR – FELDA has made effective efforts in offering the settlers a 'secured' transition to an improved social life. Leaving the loose and 'spontaneous' traditional community spirit behind them, the settlers have now seen their social life consolidated and merged into the operational framework of FELDA. They have become part of its economic structure, linked directly to serve the purpose of a large-scale cash crop production. The access to local marketing services, however, has not satisfied many settlers, especially those from Ciku. Although being supplemented by the weekly market, the goods and services were restricted to an intermediate level because of the organisation of the regional marketing network. Hence, market goods and other social services of higher level have to be sought in established regional centres. This suggests another issue for investigation.

4. REGIONAL ACCESS TO HIGHER-LEVEL GOODS AND SERVICES

The local supply of goods and services in Bandar Tun Razak and Ciku has remained at a low level because of the relatively meagre purchasing power of the settlers. Indeed, goods and services offered within the schemes have been restricted to meeting basic necessities. Higher-level goods and services have to be obtained from other urban centres. Thus, this question of regional access and interaction is important because it
relates to both the social and economic-life of settlers and the broader regional development strategy. Before we examine how the access to the regional centres has developed, we need to raise a series of pertinent questions: how often do the settlers travel to the regional centres; why do they go; and, how do they get there? In tackling these questions, we study the settlers' frequency of travel in a range of towns, followed by their motives and means of transport.

**Frequency of Travel**

Visits away from the schemes are a strong reflection of the types of goods and services required by settlers but which are lacking in the local community. The availability of these goods and services have regional implications. They highlight not only settlers' income levels but where savings have been spent. For this purpose, this survey focuses on towns that settlers selected to visit (but excludes the annual trip home undertaken by Muslims during the Hari Raya Puasa at the end of the fasting month). This home trip covers the whole of West Malaysia which is beyond the regional focus of our study.

Primarily, the frequency of visits to the prescribed list of towns in Table 6.6 depends on the distance, means of transport and types of goods and services available. Frequency is calculated on the basis of average number of trips per settler per year (Figure 6.1). The survey indicates that Bandar Tun Razak settlers travelled much more often than their Ciku counterparts, reflecting not only their higher incomes but also the greater proximity of more towns. Their most favourite town was Segamat, 60 kilometres to the south and situated outside the Pahang Tenggara region. On average, they made 21.3 trips per year—three times higher than to Muadzam Shah, the designated regional centre of the Pahang Tenggara Master Plan (Dara, 1972a). Bahau, another town lying outside the Pahang Tenggara region ranked third after Muadzam Shah. Conversely, Gua Musang (regional centre for Kesedar) received the largest number of Ciku settlers, with an average frequency of 14.2 trips per year. Frequency to other towns fell sharply after Gua Musang. Although Kuala Krai can be reached easily from Ciku by a highway, the
frequency of travel to that destination accounted for only one-tenth of that to Gua Musang. In contrast, the completion of the ‘Kuantan-Segamat Highway’ in 1984 had a dramatic effect upon settlers of Bandar Tun Razak; it enabled them to travel to Segamat more frequently at a lower cost.

Table 6.6
Population of Selected Urban Centres Visited by Settlers

<table>
<thead>
<tr>
<th>Bandar T. Razak</th>
<th>Population</th>
<th>Ciku</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuala Lumpur</td>
<td>919,610</td>
<td>Kota Baru</td>
<td>167,872</td>
</tr>
<tr>
<td>Seremban</td>
<td>132,911</td>
<td>Kuala Krai</td>
<td>12,607</td>
</tr>
<tr>
<td>Kuantan</td>
<td>131,547</td>
<td>Pasir Mas</td>
<td>13,402</td>
</tr>
<tr>
<td>Segamat</td>
<td>34,008</td>
<td>Tanah Merah</td>
<td>9,016</td>
</tr>
<tr>
<td>Kuala Pilah</td>
<td>11,954</td>
<td>Machang</td>
<td>5,012</td>
</tr>
<tr>
<td>Bahau</td>
<td>10,260</td>
<td>Gua Musang</td>
<td>4,973</td>
</tr>
<tr>
<td>Temerloh</td>
<td>8,176</td>
<td>Pasir Puteh</td>
<td>3,432</td>
</tr>
<tr>
<td>Muadzam Shah</td>
<td>7,754</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kuala Rompin</td>
<td>1,162</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: a Old town excluded.

Motives of Travel

There were multiple factors attracting settlers to urban centres. Even in a single trip, there could be more than one motive. To provide a clear picture of settlers' mobility, only the primary motive of each trip was recorded. These motives are grouped into four categories: shopping, entertainment, visiting relatives or friends and others. Entertainment is an equivalent to 'berjalan-jalan' (literally to go for a walk), a Malay term frequently used by settlers to indicate a trip without specific purpose. Yet, the trip is important as it includes seeing a movie, eating out in a restaurant, watching the parade of a special occasion, or just having some refreshment in a coffee shop as a means of relaxation away from routine work or boredom. Under 'others' was encompassed a wide
Figure 6.1: Frequency of Travel by Settlers to Nearby Towns

Source: Fieldwork.

Direction of travel (numbers indicating frequency of trips: per settler per year)
range of motives such as medical consultation, religious observance, banking, paying the water bill, course training, contract negotiation, meeting or attending government offices. For each category of motives, the average number of trips made by a settler within a year is given in Figure 6.2. Only trips recorded more than once a year are shown.

Obviously, Segamat and Bahau supplied the bulk of the higher-level goods and services sought by settlers from Bandar Tun Razak. Indeed, Segamat was the pole of attraction to both retailers and consumers for shopping, recording 18.9 trips per year per settler. This accounted for 87 per cent of all shopping trips. Not only did Segamat serve as a commercial centre where settlers could put their savings in banks or buy motorcars in an affluent year (as in 1984) but also it was a social interacting place from the 'frontier' to 'civilised urban zone'. Despite a relatively large population of 21,000 people, Bandar Tun Razak was little more than a planned agglomerated groups of kampung where social life remained basically rural, thus making no significant difference from the settlers' place of origin. Following far behind Segamat came Bahau which received only 2.1 trips from Bandar Tun Razak settlers for shopping (10 per cent). Muadzam Shah was not viewed as ideal for shopping as only 5 per cent of settlers visited the centre for the purpose. This centre, however, served more for entertainment and other specific purposes such as banking, administration tasks and meetings in the FELDA's regional office.

In Ciku, almost all visits were focused on Gua Musang, the designated centre of the Kesedar region. Like settlers of Bandar Tun Razak, shopping was the most important motive of travel. Settlers made an average of 6.1 trips per year to Gua Musang where 84
Figure 6.2: Motives of Travel by Settlers to Nearby Towns

Source: Fieldwork.

(numbers indicating frequency of trips per settler per year)

- Shopping
- Visit Relative/Friend
- Entertainment
- Others (banking, administration, meeting, contract negotiation, religious affair)
per cent of all external shopping from Ciku was concentrated. Other higher-level services - medical consultation, religious observance and government administration, ranked in second place. Except during the Hari Raya break, Bandar Tun Razak settlers seldom visited relatives in the rest of the year because of their widespread origins. Ciku settlers made more trips to see their relatives, especially those who had children attending primary and secondary schools in Gua Musang. Another feature differentiating settlers of Bandar Tun Razak from Ciku residents was their exposure to the outside environment. The former travelled not only more often but also further away. They went to Kuala Lumpur and Seremban and Kuala Lumpur for specific motives such as course training, purchases for FELDA's cooperative or religious affairs. Ciku settlers, however, seldom went north. If they did, they used the occasion to buy daily needs and visit relatives or friends. Making a trip specially for entertainment was extremely rare.

The mobility of settlers between the frontier settlements and the urban centres can be exemplified by a few case studies. In Bandar Tun Razak, Kadir bin Said runs a grocery shop. He drives down three times a week to Segamat to acquire provisions from wholesalers to refill his stock. Poh Ah Ha, however, rarely goes to Segamat. His trip to Bahau three times a month serves a dual purpose - shopping and visiting a few friends of his dialect group. On each trip, he will make sure to purchase enough pork for a week's consumption as it is unavailable in Bandar Tun Razak. In Ciku, Che Wil bin Che Muda goes once a month to Gua Musang for household needs that are lacking in the local tiny grocery shops. Apparently, he enjoys the trip which allows him to forget for a while the endless routine tasks in the oil palm plantation. Yet, there is another mission for him in Gua Musang - to see his two children staying in a boarding school in town and hand them some money. If Bandar Tun Razak settlers were in a much better financial position to travel than their Ciku counterparts, we need to further examine the means of transport that they used - a factor having strong implications for regional access.
Means of Transport

It was apparent that settlers perceived an improvement in public transport after moving. About 50 percent of settlers of Bandar Tun Razak were satisfied with the service compared to about half for their Ciku counterparts (Table 6.1). In fact, bus services were regular and quite efficient in both Bandar Tun Razak and Ciku. Coupled with the relatively cheap fare, buses became the most important means of public transport to settlers in communicating with the outside world (Figure 6.3). In addition to buses, settlers also, on occasions, used private cars and taxis. In Bandar Tun Razak, if travelling alone, settlers rarely used their own cars but took buses to minimise expenses provided business was involved. This was even more so for Ciku car owners (about 10 of them) who used their cars strictly for essential trips including business. During low income months, cars were more a prerequisite for earning supplementary income than an object of pleasure.

Motorcycles were widely used by settlers of Bandar Tun Razak over shorter distances, particularly when visiting Muadzam Shah and Segamat. In contrast, Ciku settlers rarely used them and restricted their use to visiting Gua Musang. Because of budgetary constraints, most of the Ciku settlers did not pay motorcycle registration fees and had, as a result, restricted its use to daily journey to work. Thus, Poh Ah Ha of Bandar Tun Razak rides his motorcycle to Bahau because the bus service was terminated some time ago for lack of passengers. To Segamat, he prefers to take a bus as it is less tiresome. Without registering his motorcycle, Che Wil of Ciku is worried about the police check set up frequently along the highway to Gua Musang. Consequently, he has to catch a bus.

The mobility of settlers has shown that access to regional centres for higher levels of goods and services has been relatively easy. The intensity of travel from Bandar Tun Razak and Ciku depends upon distance, means of transport and types of goods and

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1 Including a few trucks and vans in Bandar Tun Razak.
Figure 6.3: Means of Transport by Settlers to Nearby Towns

Source: Fieldwork.

(numbers indicating frequency of trips per settler per year)

- Bus
- Motorcycle
- Own Car
- Taxi
services. Their movements have not been restricted by the regional boundaries drawn by politicians and planners with predetermined objectives. Instead, this mobility has been dictated by a logical response to meet their needs and circumstances; the latter reflecting the frequency of travel and means of transport. The better-off Bandar Tun Razak settlers were more involved in meeting their business obligations and household needs than their Ciku counterparts. Having established the varying degrees of accessibility, attention can be shifted to the evolution of educational opportunities before and after the shift—a factor closely associated with retaining the second generation on the frontiers.

5. CHANGE IN EDUCATIONAL OPPORTUNITIES

As noted in Chapter 5, one of the important motives behind the move expressed by settlers to shift was the hope that their children would have better educational opportunities on the frontier. The reaction of settlers, however, has been mixed (Table 6.1). Three-quarters of Bandar Tun Razak settlers were satisfied with the quality of education but less than half of their Ciku counterparts shared this view. The difference in perception reflects the varied backgrounds of the settlers. Our field survey indicates Bandar Tun Razak settlers came from nine states of West Malaysia, with Pahang making up the highest proportion. Conversely, Ciku settlers were all drawn from Kelantan by the ruling of the state policy (Figure 6.4). Nevertheless, there was a common feature marking settlers from both areas. They were recruited from the lower social strata in the rural areas (over 85 per cent) and very small towns and were engaged in subsistence or low income occupations. As a means of escaping poverty, settlers were convinced that education provided the best opportunity for their children to achieve a higher social status. Before examining the changes in education brought about by the shift, we need to find out first the levels in their place of origin.
Educational Opportunities Before Moving

The survey of settlers' education levels indicates that they had generally received a low level of formal training. The highest level achieved was Form 5 (Tingkat 5) of secondary education. Of the five levels categorised (Table 6.7), it is found that settlers of Bandar Tun Razak and Ciku had a very close pattern. Although Bandar Tun Razak settlers seemed to have received more formal education than their Ciku counterparts, less than 20 per cent of settlers from both areas had been to a secondary school. There is another characteristic worth noting — younger settlers in both areas had received more formal education than the older groups. By the same token, settlers of both areas were generally better educated than the earlier FELDA settlers of the 1960s and 1970s — a reflection of the gradual expansion of educational system initiated throughout West
Malaysia's rural areas since the 1950s. This impact was, indeed, quite substantial. Thus, by examining the new educational opportunities in the resettled areas, we can verify whether the situation has improved over time.

**Educational Opportunities After Moving**

Some settlers, in Ciku particularly, had not brought their school-going children with them. An important reason behind this option was attributable to their belief that standards in the established schools in their place of origin were generally higher. Secondly, in Ciku, there was still no secondary school. Moreover, among the newcomers, a considerable proportion chose to bring the other family members at a later stage. Consequently, they had left some of the children behind with relatives or in boarding schools in other urban areas.

### Table 6.7

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Bandar Tun Razak</th>
<th>Ciku</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>5.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Primary (Standard 1-3)</td>
<td>11.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Primary (Standard 4-6)</td>
<td>65.0</td>
<td>69.0</td>
</tr>
<tr>
<td>Secondary (Form 1-3)</td>
<td>15.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Secondary (Form 4-5)</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Fieldwork.

Educational facilities were better equipped in Bandar Tun Razak than in Ciku. At primary school level, there were five schools in Bandar Tun Razak. Conversely, in Ciku, there was a temporary primary school a few kilometres way, using premises built in the
late 1970s for FELDA staff. At the time of survey, a permanent one was being built and was expected to be operational by April 1988. Almost all settlers' children of Bandar Tun Razak attended local schools whereas a higher percentage of Ciku children did not attend the temporary school at Ciku. Instead, they followed their elder brothers or sisters who attended secondary school in Gua Musang.

Almost all the settlers' children in Bandar Tun Razak attended local schools. It did not take more than fifteen minutes for children to walk to their primary schools. Motorcycles and occasionally cars were used by parents to carry their children to school. The Ciku children, however, were less fortunate. They either cycled or had to be carried by FELDA trucks and paid a monthly fee of $4 each. At secondary school level, again the children of Bandar Tun Razak were better off. Here, a double-storey school stood within a spacious compound in Keratong 4, adjoining a main access road (see Figure 6.5). For Ciku settlers, the designated lot has been located in Ciku 3 (about 5 kilometres away along the Gua Musang-Kuala Krai Highway). This school will only be ready by 1989. Up to February 1988, about a third of settlers sent their children to Gua Musang High School (34 kilometres away), with boarding facilities. Boarding priority was, however, given to Form 3 and Form 5 students due to sit for the public examinations. The rest had to commute daily by school buses provided by FELDA and a private company (Syarikat Kemajuan Melayu Kelantan)². Although virtually never attended by parents previously, kindergartens were common place – six in Bandar Tun Razak and two in Ciku, operated by the FELDA Scheme Development Authority (JKKR). Each child paid a monthly fee of $7.50-8.00 for the service. Both settlers of Bandar Tun Razak and Ciku had their children attending boarding schools other than in Bandar Tun Razak and Gua Musang. In recent years, FELDA's scholarship fund and study loans had enabled a small number of settlers' children to acquire training in Kuantan, Segamat, Kuala Rompin, Kuala Lumpur and Kota Baru. To provide vocational training to settlers

² Fares charged varied according to settlers' status. While those grouped under the 'block system' paid $20.00 monthly for each child, the rest working for subsistence wage paid only $7.50. Conversely, the private company charged a flat rate of $28.00 per child per month
Figure 6.5: Detailed Plans of Bandar Tun Razak and Ciku

Source: Fieldwork.
and their children, FELDA has set up a Training Centre in Bandar Tun Razak. Courses conducted, however, were very basic, with sewing and typing being the most important. Nothing of the same nature has yet existed in Ciku.

From the changes evolved, children in Bandar Tun Razak and Ciku had obviously better opportunities to receive higher education than their parents who often complained about financial difficulties and the poor school facilities of their schooling days. This was the case of Haji Ahmad bin Serman of Bandar Tun Razak. When he was a boy, few from his kampung were able to attend high school in the nearest town. Like many others, his father was too poor to support him for further studies after he completed primary school education. Now, as a father himself, he has decided not to repeat the 'misfortune'. He now supports two older daughters to study in a boarding high school at Kuala Rompin while having two other younger children attend a local primary school. His Ciku counterpart, Mohammad Zain bin Che Hassan, has the same conviction. With only a few years of schooling and formerly a guard in a rubber estate, he wants his children to do something more 'prosperous' in their future careers. His oldest son is seventeen and is a student at an Arabic school in Pasir Mas. His other three school-aged children are studying either in Gua Musang or in the local school.

Indeed, education has been an important social facility and priority of the settlers. Many settlers judge their children's education achievement as their own success. They have seen substantial progress in the shift from their own generation to that of their children. In fact, except for a small number of drop-outs, all primary school-aged children in both Bandar Tun Razak and Ciku attended school. Furthermore, more than half of secondary school-aged children in the two areas attended school. If educational opportunities have improved over time, and the second generation has been expected to
seek a better livelihood than that of their parents, how will the opportunities on the" frontiers be able to retain them? This question is now investigated.

6. THE SECOND GENERATION

After thirty years of converting the frontiers into cash crop plantations, FELDA has transformed the subsistence farmers and low income-earners into modern cash crop farmers. The first generation settlers have acquired higher material standards of living, accompanied by paid subsidiary jobs, improved local social facilities and a relatively easy access to higher-level goods and services in regional centres. According to our survey, these improvements have convinced virtually all settlers to remain on the frontier. Very few wanted to leave. But there is a future problem. FELDA's benefits are restricted to the first generation. What new employment opportunities are there in the frontier to retain the second generation? Before we analyse this issue more comprehensively, we have to look first at the issue of land inheritance.

The Dilemma of Inheritance

Originally, a main objective of the FELDA resettlement programs was to solve the land shortage problem in the rural areas. Given that land was a scarce resource, most settlers of oil palm were allocated 4 hectares of land to maximise the number of households resettled. No land reserve for the second generation, however, was considered. Consequently, two problems will be created when the children grow up. The first problem involves land inheritance because under Islamic law sub-division will be uneconomic. The seriousness of land fragmentation problem can be predicted from an analysis of the family structure in Bandar Tun Razak and Ciku.

Table 6.8 shows that settlers of Bandar Tun Razak and Ciku both had an average family size of 6.5. As the average age of wives was 33.6 in Bandar Tun Razak and 31 in Ciku, the potential for additional childbirth was high. Thus, the chance of increasing the average number of children per family from 4.5 to 6 until the end of the fertility period is
likely. This projection is not exaggerated in the light of current population policy which encourages larger family size to meet the government's seventy million target by the year 2100 (Malaysia, 1985:14 and 1987b:93). With the family expanding in size, the future occupation of the children will need to be located elsewhere as only one male child can succeed the father when he retires. Even the father's working hours are relatively short, particularly when he has no subsidiary job.

Table 6.8
Family Structure of Settlers of Bandar Tun Razak and Ciku

<table>
<thead>
<tr>
<th>Category</th>
<th>Bandar Tun Razak</th>
<th>Ciku</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Husband’s Age (years)</td>
<td>37.8</td>
<td>36.4</td>
</tr>
<tr>
<td>Average Wife’s Age (years)</td>
<td>33.6</td>
<td>31.0</td>
</tr>
<tr>
<td>Children’s Age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-4</td>
<td>107</td>
<td>129</td>
</tr>
<tr>
<td>5-9</td>
<td>150</td>
<td>142</td>
</tr>
<tr>
<td>10-14</td>
<td>107</td>
<td>113</td>
</tr>
<tr>
<td>15-19</td>
<td>64</td>
<td>42</td>
</tr>
<tr>
<td>&gt;20</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>453</td>
<td>447</td>
</tr>
<tr>
<td>Average Family Size</td>
<td>6.5</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Source: Fieldwork.

Settlers’ Present Workload

From our field survey of the settlers' working hours in their primary tasks, we found that a Bandar Tun Razak settler on average worked 15.6 days per month for 6.3 hours per day. By comparison, a Ciku settler laboured 23.3 days and 4.4 hours daily. On a weekly basis, a Bandar Tun Razak settler worked about 22 and a Ciku settler 23 hours, which is quite short by the Malaysian standards. Ciku settlers spent more days in the field because 55 per cent of them were non 'block system' members who were required to work six days per week for their wage (Friday was a free day). Conversely,
the settlers of Bandar Tun Razak – all block members – had more flexibility in work schedules except at harvest time. In fact, with some experience, the overall task of harvesting and maintenance could be handled by a single able-bodied settler without requiring help from other family members and, he enjoys 'leisure' time.

Thus, if the first problem is linked to land inheritance and occupation, the second problem involves generating other non-agricultural activities to absorb the second generation. Without adequate non-agricultural jobs emerging in the resettled areas or the opportunities to gain urban employment, the second generation youth will likely become 'surplus' rural labour and experience the poverty which their fathers emerged from before moving to the frontier. So far, however, the increased off-farm opportunities available locally has been hardly inadequate to absorb even the first generation (Table 5.7). Furthermore, the types of subsidiary jobs have been restricted to oil palm plantation activities, petty trade, construction and other local services needed to maintain a basic livelihood in the resettlement community.

Characteristics of FELDA's Cash Crop-Based Set-up

Within the FELDA schemes, land for growing subsidiary crops and rearing fish is severely limited. Only lower-grade terrain unsuitable for oil palm and houselots has been allotted for these purposes. Cattle raising by settlers cannot be relied too much upon as grass available is also limited for any large-scale expansion. In FELDA's set-up, virtually all forward and backward linkages within the oil palm plantation are outward-oriented. The settlers only assume a small share of the whole distribution and service business. The principal operations, including the processing of fruit bunches, marketing of crude palm oil and transporting services are assumed by FELDA. Other inputs such as parts for the processing mills, fertilizers, insecticides and implements for field maintenance are imported from important national centres. The output, crude palm oil, is also carried outward for either direct export or domestic reprocessing. Further the basic needs of the settlers – rice, vegetables, clothes – are all imported.
In terms of consumption demand, we have seen that about half of the settlers' income had to be spent on food. The remainder of the income was used for other basic demands and children's education. Savings were largely spent on consumer durables acquired from regional centres. Virtually no items for household consumption were produced locally, except some vegetables, fruits and root crops grown for self-consumption. Given the relatively efficient distributive system established in the regional centres, local engagement in providing high-level goods and services had been edged out. Even traditional services such as midwifery and doctors (bomoh) were running out of business once the government health care service reached the settlers. As a result, settlers had to concentrate on local transport, retail trade, construction and some other personal service such as beverage and repair shops. Consequently, the number of jobs that settlers' children could acquire locally was even smaller, as indicated in Table 6.9.

These data reveal that most offspring over 18 years of age were employed away from home. Few were employed locally – about one-quarter in Bandar Tun Razak and one-third in Ciku. Of the rest, a small proportion were still schooling in other towns while most were either jobless or helping their parents. The problem of obtaining employment is reflected in the experience of Zainal Abidin. Abidin is now 22 years old. He finished Form Five at Termeloh in 1982 and completed another two-year business course at Segamat in 1987. There is, however, no proper position for his qualifications in Bandar Tun Razak. He tried to get a job in an urban centre. But in the public service, the government has just frozen the intake of new personnel in a bid to control public expenditure. Further, there are few opportunities in the private sector as the severe recession that started in 1985 has yet to bottom out. Without relatives or friends to help him, Abidin has to remain in Bandar Tun Razak to help his father in the field and the little grocery shop.

Thus, the generation of local employment has to come from additional non-farm opportunities. This needs incoming investment or the entrepreneurship of local settlers to boost the economic base. The problem of incoming investment will be taken up in
Chapter 8 where the failure of rural urbanisation will be explained. Attention is now focused on local entrepreneurship.

### Table 6.9

**Employment Situation of The Second Generation**

<table>
<thead>
<tr>
<th>Type of Job</th>
<th>Bandar Tun Razak</th>
<th>Ciku</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employed Locally</td>
<td>Employed Elsewhere</td>
</tr>
<tr>
<td>Farm-Related</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Harvest</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Non-Farm Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory Worker</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Truck Driver</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Sales</td>
<td>1(^a)</td>
<td>-</td>
</tr>
<tr>
<td>Clerk/Typist</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Construction Worker</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Technician/Mechanic</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Military/Police</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5</strong></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td><strong>Households Surveyed</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Note: \(^a\) FELDA Cooperative (Perbadanan Niaga FELDA)

Source: Fieldwork.

**Local Entrepreneurship**

Settlers are encouraged to start businesses in FELDA schemes. Only settlers are allowed to operate from permanent premises within the schemes. This measure is expected to provide an 'almost exclusively Malay environment in which infant enterprises could enjoy a degree of protection' (Blair, M. Noor and Tan, 1979:15). Whether settlers in Bandar Tun Razak and Ciku involved in business have taken any loans from FELDA's revolving fund is unknown, but it can be certain that settlers running retailing, processing and agricultural business began with very little capital. This business was mainly
restricted to grocery shops and stores in the central market supplying daily food items. Their ability to compete has remained at a low level, as can be observed in the weekly market where competition penetrates from other places. Clearly, the findings agree with the pessimistic view of Blair, M. Noor and Tan (1979:36) about the prospect of business within the FELDA schemes. The direct urban connection is vital to settlers' business expansion. Yet, this has not achieved a scale of any significance as supplies were still largely from middlemen coming in with their vans from regional centres. Direct urban connections are important to allow local products (other than crude palm oil) or services to be consumed by urban dwellers. In Bandar Tun Razak, handicraft was once conceived as an alternative to mobilising women to manufacture artifacts. The handicraft centre, however, had to import raw and semi-finished materials from Petaling Jaya and Kuala Lumpur. Consequently, the cost of production was high, making it uncompetitive to start the operation on a medium scale. There are enterprising settlers, however, who are hopeful of making a fortune, despite the pessimism.

In Bandar Tun Razak, Zakaria bin Zulkifli is an ambitious young man of 27 years and one of the few settlers to have completed Form Five. Before becoming a settler, he was a typist in Pahang Tenggara Branch Office at Bandar Tun Razak. He quit at the end of 1986 to join the rank of settlers, with a clear idea of starting a business. As a start, he sold hamburgers and repaired shoes while paying his fellow team-mates to do his field tasks. Known as 'burgerman', he can be seen almost everyday in the heart of the township with his self-made 'B.B.Q. plate', preparing orders with admirable patience. When asked if he could enrich himself in this way, he was not sure. But he asserted that acquiring business experience is more important than anything else. With experience and some capital, he believed there will be many other opportunities within Pahang Tenggara Development Region.

In Ciku, Mohammad bin Abdullah's successful case is exceptional as most businesses here are small with miserable profit margins. As a good negotiator, Mohammad has won a number of contracts including field manuring, harvesting,
transporting fruits and building storage houses. Moreover, he owns a grocery shop which is managed by his wife. The whole set of businesses and his income from the 4 hectare plot earn him more than $1,100 a month, a figure not achieved by other settlers.

In summing up, the situation in Bandar Tun Razak and Ciku has not provided the second generation with good prospects to remain on the frontier. Land inheritance will only be adequate for one male child. They are few off-farm secondary and tertiary opportunities to absorb the younger generation. The bulk of them will have to go elsewhere for jobs. Local entrepreneurship, however ambitious, is unlikely to influence this trend to any extent.

**Resume**

Initially, attention in the chapter was focused on the perception of change from the angle of the settlers. Except for local marketing, and in the case of Ciku settlers for education opportunities also, settlers from both Bandar Tun Razak and Ciku were happy with the change in the shift. This included housing, social facilities and public transport. After repaying loan instalments to FELDA for 15 years, the settlers will eventually become proprietors of a 4-hectare oil palm plot and a houselot. This represents major capital gains with which they can pass on to their children. Their perception of change, however, depended on their social background and exposure to the outside living environment. Settlers' access to regional centres for higher goods and services corresponded with their daily needs and circumstances. The frequency of travel conformed with their income levels, and relied upon the distance, means of transport and types of goods and services available. Their mobility has not been restricted by planned regional boundaries.

Despite general progress, the benefits seemed to be limited to the first generation of settlers. The second generation is expected to face a dilemma. First, the land to be inherited will be too small for future sub-division. Secondly, there will be relatively few opportunities to absorb them as secondary and tertiary jobs have not been adequately
created. Their future needs local entrepreneurship and incoming investment. Local investment, however, has been weak because of the limited scope for expansion within the FELDA framework and settlers' expenditure pattern. Few jobs have arisen in this aspect. The failure of the rural urbanisation strategy as applied in Pahang Tenggara and South Kelantan and the problem of attracting investment to boost the economic base will be analysed in Chapter 7.
PART III

RESOURCE FRONTIER STRATEGIES RECONSIDERED
CHAPTER 7

LESSONS FOR MALAYSIA IN THE 1990S AND BEYOND

Malaysia has been implementing forms of frontier development for at least thirty years. It is now possible to assess the resource frontier strategy and prospects for the future. Integrated as part of the New Economic Policy since 1970, the aims of the resource frontier strategy are to: (a) eradicate poverty; and (b) eliminate the identification of race with economic function and geographic location (Government of Malaysia, 1976:7). The first objective targets the poverty problem which has a strongly rural, regional and ethnic orientation. The second objective involves mechanisms to tackle it.

Hence, a critical issue is raised: has the strategy been successful in dealing with the poverty and spatial issues and meeting the objectives of the New Economic Policy? Once this key question has been addressed, we are in a position to raise another issue: what lessons can be learned from Malaysia's experience for national planning in the 1990s and beyond?

In tackling these questions, the argument is divided into two parts. Part one assesses the results of the resource frontier strategy in terms of the two-pronged objectives of the New Economic Policy. Section 1 focuses on the overall change in FELDA settlers' living standards and explains how this has been achieved. Based on evidence from Pahang Tenggara and Kesedar, we examine if industrialisation and urbanisation has been adequately achieved on the frontiers (Section 2). In part two, attention is focused on the lessons and the effects of resource frontier strategy on national urbanisation. Within FELDA schemes, we discuss the sustainability of settlers' living standards and land availability, followed by an examination of the second generation issue (Section 3). Finally, we proceed to examine the effects of resource frontier development on metropolitan centres (Section 4).
1. POVERTY ALLEVIATION

In alleviating the incidence of poverty, FELDA's task has been centred on mobilising subsistence farmers and other low-income groups from lagging areas for higher productive cash-crop activities. To what extent has this attempt been successful in alleviating rural poverty? Attention is focused on the change in settlers' living standards.

Overall Change in FELDA Settlers' Living Standards

A very common criterion used in assessing whether a settler community's living standards have improved is by looking at the change of the incidence of poverty. Before any change can be measured, the meaning of absolute poverty, however, needs to be clarified. The Fifth Malaysia Plan (Government of Malaysia, 1986a:82) defines absolute poverty as the 'lack of income needed to acquire [the] minimum necessities of life'. Those deprived of these minimum material necessities are, therefore, seen as living below the poverty line.

Clearly, cash income is not the only criterion of evaluation. Facilities and amenities must not be ignored. In general, FELDA settlers enjoy relatively high income and public facilities when compared with most public sponsored resettlement schemes in South America, Africa or Indonesia where landless families were settled at little more than subsistence levels (World Bank, 1978:15-18). Omar Din's (1981) findings about FELDA settlers have some significant implications. After 10 to 12 years of settlement, he observed, FELDA settlers would earn 50 to 75 per cent more than their fellow rural counterparts of the same age who remained behind in the lagging areas. His conclusion might have been based on a particular year and, therefore, cannot be representative because settlers' income levels are highly dependent on commodity prices. When commodity prices were good as in 1984, an average settler household engaged in oil palm production could earn an average net monthly income of $1,231 compared to $505 for an average rubber scheme smallholder household (Table 7.1). Conversely, the poor international demand for palm oil in 1986 brought the settler's monthly income down to
less than a third of the 1984 level. Further, the settlers' cash income depends upon their
lot size which varies from 2.4 to 5.7 hectares – a disparity of almost 2.4.

Table 7.1

<table>
<thead>
<tr>
<th>Lot Size (ha)</th>
<th>Oil Palm Scheme 1984 ($)</th>
<th>Rubber Scheme 1984 ($)</th>
<th>Oil Palm Scheme 1985 ($)</th>
<th>Rubber Scheme 1985 ($)</th>
<th>Oil Palm Scheme 1986 ($)</th>
<th>Rubber Scheme 1986 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4</td>
<td>-</td>
<td>460</td>
<td>-</td>
<td>366</td>
<td>-</td>
<td>333</td>
</tr>
<tr>
<td>2.8</td>
<td>-</td>
<td>456</td>
<td>-</td>
<td>371</td>
<td>-</td>
<td>368</td>
</tr>
<tr>
<td>3.2</td>
<td>-</td>
<td>529</td>
<td>-</td>
<td>423</td>
<td>-</td>
<td>415</td>
</tr>
<tr>
<td>4.4</td>
<td>1,202</td>
<td>493</td>
<td>885</td>
<td>429</td>
<td>376</td>
<td>409</td>
</tr>
<tr>
<td>4.9</td>
<td>1,401</td>
<td>1,183</td>
<td>764</td>
<td>1,010</td>
<td>359</td>
<td>976</td>
</tr>
<tr>
<td>5.7</td>
<td>1,720</td>
<td>-</td>
<td>1,203</td>
<td>-</td>
<td>379</td>
<td>-</td>
</tr>
<tr>
<td>Average</td>
<td>1,231</td>
<td>505</td>
<td>889</td>
<td>421</td>
<td>376</td>
<td>405</td>
</tr>
</tbody>
</table>


Despite uncertainty in income levels, FELDA settlers have been privileged in many
ways. Their income is mainly derived from farm produce of the working plots. Off-farm
activities bring additional income to many households. They purchase the bulk of their
food, as crops produced for home-consumption is negligibly small (Blair, Dissanayake
and M. Noor, 1980:75-76). This is, however, compensated by owner-occupied housing.
They also enjoy relatively good-quality free or subsidised public health, education,
transport and utility services. Most notably, when commodity prices fall dramatically,
they are provided with an additional loan to cover the difference between the actual
income and the poverty line¹. Consequently, settlers can still meet minimum necessities
and live above the absolute poverty line.

¹ D. S. Gibbons's 1982 calculation fixing Malaysia's poverty line at S330.00 per household has been
widely followed in the country (see Courtenay, 1988:250). In 1986, FELDA settlers in Bandar Tun
Razak were granted an extra loan when their monthly cash income fell below S350.00 – a figure
matching Gibbons's estimate after adjustment for the rise of consumer price index for basic items.
Because of the special status that FELDA settlers enjoy, they are considered modern farmers who have forsaken 'subsistence' living. Consequently, the 'Household Income Survey' conducted by the government in 1984 did not include any FELDA farmers as living under the poverty line. Absolute poverty was seen as highly related with existing 'subsistence peasantry' – small padi, rubber and other commercial crop farmers – a sub-sector that the NEP planners aimed to eliminate by either raising their productivity or guiding them to other higher income activities. Besides, a smaller number of lowly-paid workers involved in mining, manufacturing, construction and other rural services fell within the category of poor households (see Government of Malaysia, 1986a:Table 3.1). Indeed, FELDA settlers' material achievement has been attributable significantly to a high-cost approach.

FELDA's High-Cost Approach

Compared to resettlement programs in other parts of the developing world, the cost to develop FELDA schemes has been relatively high. From 1956 to 1986, the total Federal and non-Federal loans used for resettling about 100,400 households had cost $5,230 million (Table 7.2). For each settler household, the average cost was $52,100 or 3.8 times higher than the transmigration program in Indonesia.²

From these data, we can identify three inter-related sources which have brought about a rise in income of the settlers – Federal government, international financial institutions, and settlers themselves. The support of the Federal government has been crucial as it accounted for $4.67 billion (89 per cent) of total development expenses up to 1986. The World Bank occupied a second place – 6.8 per cent. The price of supporting FELDA has been high. At the end of 1985, FELDA's loan drawings totalled $4,852 million but it had only repaid $606 million, of which $283 million was for loan interests (FELDA, 1985:17-18).

² The development cost of food crops is US$5,500 per household (information provided by Joan Hardjono). Food crops account for more than 80 per cent of the transmigration models. One United States dollar is equivalent to 2.5 Malaysian ringgit.
Thus, FELDA settlers' improved standards of living have been realised by pursuing a high-cost approach. Basically, it is seen as a trade-off to eliminate poverty – the first pronged objective of the NEP. Having examined how FELDA settlers have achieved higher standards of living in their primary agricultural activities, we proceed to assess the results of promoting non-agricultural occupations on the frontiers – the second objective of the NEP.

**Table 7.2**

Sources of FELDA's Development Fund, 1956-1986 ($Million)

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Government</td>
<td>4,673.438</td>
<td>89.4</td>
</tr>
<tr>
<td>Through Federal Government from:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Bank</td>
<td>354.673</td>
<td>6.8</td>
</tr>
<tr>
<td>Asian Development Bank</td>
<td>6.874</td>
<td>0.1</td>
</tr>
<tr>
<td>Saudi Fund</td>
<td>88.961</td>
<td>1.7</td>
</tr>
<tr>
<td>Kuwait Fund</td>
<td>53.103</td>
<td>1.0</td>
</tr>
<tr>
<td>Overseas Economic Cooperative Fund</td>
<td>27.569</td>
<td>0.5</td>
</tr>
<tr>
<td>New Planting Grants</td>
<td>13.480</td>
<td>0.3</td>
</tr>
<tr>
<td>Rubber Replanting Grants</td>
<td>12.115</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5,230.213</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: The figure has been rounded to the nearest thousand.


2. **ASSESSING THE RESOURCE FRONTIER STRATEGY**

The expansion of frontier growth centres or townships depends essentially on growth of non-agricultural activities. In seeking to explain why rural urbanisation has not taken off on the frontiers, attention is focused on comparing the outcome of applying the resource frontier strategy in the Pahang Tenggara and Kesedar regions. Two strategies – growth centre and industrialisation – are discussed in particular with reference to these planned regions. This is followed by a brief assessment of whether regional disparity in
Peninsular Malaysia has been reduced as a result of applying the resource frontier strategy in general.

**Growth Centres**

The NEP equates urban existence with higher standards of living not only in the form of utilities and facilities but also the opportunities for social mobility and the change of mentality for the rural poor (See Tun Abdul Razak's remark in *Sunday Times*, 12 November, 1972). Thus, in evaluating the results of applying the growth centre strategy, we need to refer to the original targets.

The targets of the Pahang Tenggara Master Plan, however, differ markedly from those projected for the Kesedar region. With the full support from the former Pahang-born Prime Minister – Tun Abdul Razak – the originators of the Pahang Tenggara Master Plan were invited in 1970 to plan the agricultural development of a one million hectare jungle area as a means of bringing about industrialisation and urbanisation. Presumably, this costly two-year task was intended to serve as a test bed for advancing an economically disadvantaged group (Malays). As planned, secondary and tertiary opportunities would be created through development of the agricultural sector, establishment of the government administration and investment from the private sector attracted by incentives. In pursuing these targets, the Master Plan followed a growth centre strategy, using agriculture as a 'propulsive force' – a concept fundamentally different from the original Perrouxian urban-industrial emphasis. Moreover, the Master Plan consultants went further by designating Kuantan as a 'development pole'. This designation had no firm justification in terms of any industrial resources, other than the town's central location on the east coast and its potential as an international seaport. Within Pahang Tenggara, the designated regional centre, Bukit Ridan (later renamed Muadzam Shah) was to be promoted as a major growth centre (Dara, 1972a:59). Conversely, the Kelantan Selatan Development Authority was a hasty creation in 1978 following the United Malays National Organisation's electoral victory in Kelantan – once the bastion of a political opponent (Pan-Malayan Islamic Party).
The development of the Kesedar region has pursued a different and less ambitious strategy for two main reasons. Firstly, up to the early 1980s, Kelantan was not a 'favoured' state to gain substantial financial support from the federal government which determines resource allocation. Second, Kesedar has no Master Plan. The Indicative Regional Plan (Kesedar, 1984) was prepared by the 'Planning and Evaluation Division' of the Kesedar Authority itself under the guidance of a West German regional planner – Hartwig Behnfeld: Completed within a few months, the Indicative Regional Plan covers a much smaller scope of study. It used, moreover, mostly secondary sources for its projections of population, employment structure and agricultural activities. More restrained in its projections of non-agricultural opportunities, the Plan is heavily dependent upon the conventional central place system and the development axis concept, though there is some reference to the growth centre theory.

In Pahang Tenggara, however, the growth centre concept has been critical in planning. The planners of Pahang Tenggara designated Muadzam Shah as the regional centre and thirty-five other townships whose future growth would have to depend on non-agricultural activities (Dara, 1972a; 1972b). They also envisaged that the development of this region would help the growth of Kuantan. Once Kuantan grew rapidly, it would generate spread effects to the poor states of Kelantan and Trengganu, thus helping in balancing the east and west coasts (Higgins and Haynes, 1983; Higgins, 1988:226). By contrast, Kesedar’s Indicative Regional Plan placed its main emphasis on the differentiated functions of selected centres within the region. Of the six selected centres, only Ciku has originated from scratch while the other five centres (Kuala Krai, Gua Musang, Jeli, Manek Urai and Kemubu/Dabong) are existing settlements having each their respective sphere of influence and services to offer (Table 7.3). Kuala Krai occupies the position as a middle centre – ranking in the highest urban hierarchy and is underpinned by several lower-ranked centres. The latter satisfy the basic needs of rural dwellers (Kesedar, 1984:136). All settlements within the Kesedar region are oriented towards Kota Baru, capital of the Kelantan state. Thus, each centre is expected to
Table 7.3

Settlements with More Than 1,000 Population in Pahang Tenggara and Kesedar

<table>
<thead>
<tr>
<th>Settlement</th>
<th>Population</th>
<th>Settlement</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bandar Tun Razak</td>
<td>21,655</td>
<td>Kuala Krai</td>
<td>12,757</td>
</tr>
<tr>
<td>Bera</td>
<td>12,423</td>
<td>Gua Musang</td>
<td>5,497</td>
</tr>
<tr>
<td>Cini</td>
<td>12,372</td>
<td>Jeli</td>
<td>2,553</td>
</tr>
<tr>
<td>Kepayang</td>
<td>11,928</td>
<td>Manek Urai</td>
<td>2,422</td>
</tr>
<tr>
<td>Muadzam Shah</td>
<td>7,754</td>
<td>Kerubu/Dabong</td>
<td>2,232</td>
</tr>
<tr>
<td>Perantau Damai</td>
<td>6,204</td>
<td>Ciku</td>
<td>1,346</td>
</tr>
<tr>
<td>Bandar 21</td>
<td>4,306</td>
<td>Bertam</td>
<td>1,329</td>
</tr>
<tr>
<td>Mentiga Timor</td>
<td>3,704</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kota Bahagia</td>
<td>2,803</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perwira Jaya</td>
<td>2,691</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tembangau</td>
<td>2,681</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selancar</td>
<td>2,527</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seladang</td>
<td>2,287</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ibam</td>
<td>2,075</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kota Perdana</td>
<td>1,853</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cendarawasih</td>
<td>1,682</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melati</td>
<td>1,060</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paloh Hinai</td>
<td>1,024</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Dara, 1986:35. Only settlements with a population of more than 1,000 estimated for 1986 are listed;
Kesedar, 1984:162-165. Only settlements selected by the Indicative Plan to perform functions higher than the lower centre are noted (Figure 4.1).
enhance its supply of goods and services when its 'catchment area' intensifies or expands. What then are the results of the projections in the two planned regions?

The projections in Pahang Tenggara have fallen far short of their targets. By the end of 1984, more than 80 per cent of the population in the Pahang Tenggara region were still engaged in agricultural jobs. Few agricultural jobs had been generated and were largely assumed by the staff of the Pahang Tenggara Planning Authority, FELDA, public infrastructure projects and palm oil processing plants. The ambitious multiplier effects had not been achieved, nor had urbanisation taken off at the rate planned. Very much against the Master Plan's population projected for 1985 (332,700), the actual figure in 1986 was 103,450 – a third of the original target (Dara, 1986:35). Only one township – Bandar Tun Razak – reached a population of more than 15,000 (Table 7.3). Yet, a high proportion of the labourers within the region were 50,000 temporary long-term migrants from Indonesia (The Star, 16 September 1982) – a factor not anticipated in the early 1970s in the formulation of the private land schemes within the Pahang Tenggara region. They have been able to move into the estates to take advantage of shifts in the international division of labour and Malaysia's immigration policy.

The shortfall in population targets was not attributable to the delay of agricultural projects – the principal economic base of the region. Indeed, the extent of agricultural land developed up to 1984 had exceeded the Master Plan's target by 47 per cent because both public and private sectors were eager to acquire more land for cash cropping (Dara, 1985:16). Hence, the explanation which stated that the shortfall was attributable to the shortage of labourers for the necessary infrastructural works and to the competition for resources from other frontier development projects is unconvincing. Indeed, the gap between the Master Plan's projected non-agricultural jobs and the actual number is significant. Table 7.4 indicates the occupational structure of the townships with more than 5,000 people in Pahang Tenggara in the mid-1980s. Except for Muadzam Shah, all the townships achieved a much lower proportion of non-agricultural jobs than the figure.
estimated by the Master Plan. Contrary to the Master Plan projections, the township population size alone has produced no significant effects in inducing secondary and tertiary opportunities. Muadzam Shah is structurally different. As a designated regional centre, it has been the target of heavy investment by the government particularly in administration which provided 40 per cent of the total jobs.

Table 7.4

Occupational Structure of Townships with More Than 5,000 Population in Pahang Tenggara

<table>
<thead>
<tr>
<th>Township</th>
<th>Agricultural Jobs</th>
<th>% Master Plan</th>
<th>Non-Agricultural Jobs</th>
<th>% Master Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bandar Tun Razak</td>
<td>2,563</td>
<td>80.4</td>
<td>626</td>
<td>19.6</td>
</tr>
<tr>
<td>Bera</td>
<td>2,048</td>
<td>81.4</td>
<td>.467</td>
<td>18.6</td>
</tr>
<tr>
<td>Cini</td>
<td>2,291</td>
<td>78.3</td>
<td>634</td>
<td>21.7</td>
</tr>
<tr>
<td>Kepayang</td>
<td>1,630</td>
<td>79.3</td>
<td>426</td>
<td>20.7</td>
</tr>
<tr>
<td>Muadzam Shah</td>
<td>1,250</td>
<td>46.6</td>
<td>1,435</td>
<td>53.4</td>
</tr>
<tr>
<td>Perantau Damai</td>
<td>1,117</td>
<td>92.9</td>
<td>85</td>
<td>7.1</td>
</tr>
<tr>
<td>Total</td>
<td>10,899</td>
<td>74.8</td>
<td>3,673</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Note:  
- The agricultural jobs referred in the Master Plan involve resource-based undertakings including agriculture, mining, quarry and some primary and secondary processing activities.
- n.a = data not available

Source:  
- Dara, 1972a:152-Table 14.1b; 1986:36.

The growth impulses, in fact, have escaped from the Pahang Tenggara region. Between 1970 and 1980, Kuantan tripled its population and Segamat doubled, as a result of, at least in part, the 'backwash effects' from the Pahang Tenggara region.

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3 Between 1957 and 1970, Segamat experienced quite severe outmigration and its population dropped from 18,500 to 17,800. By 1980, its population had increased to 34,000, improving its ranking to twentieth place in Peninsular Malaysia's urban hierarchy.
Economic surpluses from Pahang Tenggara's agricultural hinterlands have 'trickled up' to successively higher levels, instead of to the townships (See Dewar, Todes and Watson, 1986:141). Thus, the 'generated effects' expected by the Master Plan had not supported the growth of the region but the reverse was true. In Kesedar, however, the shortfall has been smaller because of its less grandiose projections.

In terms of non-agricultural jobs, Kesedar's Indicative Regional Plan relies on the development of agro-industries, including timber, and is not optimistic of attracting large capital investments from outside the region to boost manufacturing and trade. This is more realistic than the Pahang Tenggara Master Plan. While the Pahang Tenggara Master Plan tries to project an autonomous urban hierarchical system within a planned region, the Kesedar Plan acknowledges the importance of the relationship between the region and the settlement structure outside the administrative boundaries (Kesedar, 1984:25). Nonetheless, the urbanisation strategy of the Kesedar region has not been realised. The Indicative Regional Plan for Kesedar suggested the upgrading of seven major townships4 and an increase in population from 5,000 in 1970 to 54,000 in 1990 - Gua Musang being singled out as the main regional centre with a population of between 20,000 and 24,000. These targets have not been reached. Although based on projections of vital statistics of rural and urban residents, Kesedar also fell short of its planned population target with apparently less than 8,000 people in 1987 in Gua Musang, as compared to its 1960 target of 20,000-24,000 - one third of that planned for the proposed administrative, commercial and industrial centre (Kesedar, 1980:58). It was hoped to attract 3,000 soldiers and policemen and their families to make up for Gua Musang's shortfall; the uniformed branches, however, like the proposed footloose industries, have yet to appear. Nonetheless, the unsatisfactory results of urbanisation are also related to the lack of industrial dispersal in the two regions.

4 Gua Musang, Jeli, Manek Krai, Kemubu, Dabong, Bertam and Ciku.
Industrialisation

Whether the growth centre concept can bring about rural industrial development is a direct consequence of the nature of linkages between the frontier settlements and outside leading centres. The Pahang Tenggara and Kesedar regions are newly developed regions and are heavily dependent on agriculture. About 90 per cent of the agricultural land use in both regions is under oil palm and rubber (Table 7.5). Thus, their industrial development has to rely either on processing local raw materials and resources or incoming investments. This, in turn, relies on opportunities and comparative advantages which the two regions offer.

Geographically, Peninsular Malaysia has inherited a relatively efficient urban network from colonial times focused on the west coast. As the thrust of agricultural development in the post-independence period in Malaysia has been centered on expanding the volume of export-trade, the inherent dynamics of the inherited urban network has been reinforced rather than weakened. The new urban system in Pahang Tenggara and Kesedar has been subordinated to the existing urban network on the west coast which is constantly being upgraded. Their position becomes even more vulnerable as they have become heavily dependent upon on an unstable world economy.

A case study of two FELDA settlements – Bandar Tun Razak and Ciku – demonstrates this situation. As part of cash crop producing regions in Pahang Tenggara and Kesedar, the role of Bandar Tun Razak and Ciku is outlined in Figure 7.1. Located at the lowest level in the settlement hierarchy, the two 'townships' produce raw materials (oil palm fruit) and process it locally to semi-finished crude palm oil. The entire role of raw material treatment ends here without going further while the bulk of the agri-business is executed outside the region – in national centres enjoying agglomeration advantages or foreign centres where crude palm oil is further processed into more refined or finished products. Because more than 80 per cent of crude oil is exported overseas, the largest proportion of value-added is extracted outside the country. Hence, Bandar Tun Razak
Table 7.5

Distribution of Agricultural Land in Pahang Tenggara and Kesedar

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Hectare</th>
<th>%</th>
<th>Hectare</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil Palm</td>
<td>241,369</td>
<td>77.9</td>
<td>56,910</td>
<td>39.9</td>
</tr>
<tr>
<td>Rubber</td>
<td>33,799</td>
<td>10.9</td>
<td>77,173</td>
<td>54.0</td>
</tr>
<tr>
<td>Fruits</td>
<td>23,090</td>
<td>7.4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cattle Ranch</td>
<td>5,939</td>
<td>1.9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Diversified Crops</td>
<td>4,241</td>
<td>1.4</td>
<td>8,684</td>
<td>6.1</td>
</tr>
<tr>
<td>Research Farm</td>
<td>1,012</td>
<td>0.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tea</td>
<td>526</td>
<td>0.2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>309,976</td>
<td>100.0</td>
<td>142,767</td>
<td>100.0</td>
</tr>
</tbody>
</table>


and Ciku receive relatively little return from the surplus they produce. They receive ‘higher-order’ consumer goods and essential agricultural inputs (chemicals, fertilisers, machinery, working tools etc) from their nearby intermediate towns – Segamat and Bahau, Gua Musang and Kuala Krai. These are service towns but not market towns for agricultural produce of the two regions because nearly all agricultural produce is processed by FELDA and other agricultural companies. With good road communications linking existing major urban centres, farm produce from Pahang Tenggara and Kesedar regions is efficiently exported to the international market mainly via metropolitan towns. Intermediate towns within or close to the two regions, in turn, receive their goods from other metropolitan cities in the higher hierarchy such as Kuantan, Kota Baru, Kuala Lumpur and Singapore.

Thus, the weakness of industrialisation in Pahang Tenggara and Kesedar is underlined by their dependence on barely processed raw materials. Some 85 per cent per cent of the industries in Pahang Tenggara are palm oil primary processing plants.
Figure 7.1
Linkages of Rural Townships with the World Market

Intermediate Towns (Segamat)

Higher-Order Goods

Bandar Tun Razak

Local Processing Plant

Crude Palm Oil (Little Value-added)

Ciku

Intermediate towns (Gua Musang)

Export

Import

Consumer Goods & Agricultural Inputs

Major Centres

Intermediate Towns (Gua Musang)

Consumer Goods & Agricultural Inputs

Intermediate Towns (Segamat)
Similarly, 70 per cent of Kesedar’s industries are sawmills, pulp and paper processing factories. Indeed, most of the surplus extracted from agricultural activities has not been reinvested in Pahang Tenggara and Kesedar with the exception of public investment in the form of basic infrastructure, namely roads, schools, religious and other basic facilities which are needed to ensure the flow of goods and services, and sustain the residents’ livelihood. But why has the foreign and local capital failed to invest in non-agricultural projects within Pahang Tenggara and Kesedar?

Foreign interests are volatile and highly selective in both product and location in their industrial endeavours. Capital inflow from advanced capitalist nations stems principally from their constant industrial restructuring and the competitive position of recipient nations in specific products. In fact, there was even some decrease in the early 1980s despite industrial investment incentives (Salih and Young, 1987:171). Currently, great efforts have been made to attract foreign capital and there has been some success. Not surprisingly, little in terms of infrastructure, market and labour skill on the resource frontier has attracted the attention of foreign capital.

Also, the local entrepreneurial class, whether Malay or Chinese, has shown little interest in investing in the frontier other than in cash-crops and timber. Chinese entrepreneurs have been the greatest contributors both in capital and experience. Having concentrated on tin mining, rubber cultivation, wholesale and retail business in the colonial days, they diversified their activities into transport, construction and import-substitution industries during the post-independence period. In the 1980s, their domain has expanded into the manufacturing sector including light consumer goods and automobile assembly (Salih and Young, 1987:172). Overall, however, their predilection is to invest in property, banking and the share market. The reasons are two-fold. First, their expansion into industrial undertakings has been hindered by the Industrial Coordination Act of 1975, lack of skills in high technology activities and its constant...

5 In 1975, the Act required all manufacturing firms with more than twenty-five full-time workers or $250,000 in shareholder funds to register for a licence and become bound by the equity redistribution
need for renovation. Not only has high technological know-how been controlled by multi-national corporations from the capitalist core nations, but there is an additional problem in finding the markets where they can compete. Consequently, their industrial interest has been restricted to the small and medium-scale labour-intensive manufacturing sector concentrated in established west coast cities. Any decentralising efforts to the frontier regions would be 'financial suicide'.

Secondly, within the framework of world trade, Malaysia's comparatively efficient cash agricultural and mining sectors have created a relatively large urban middle class. It comprises professionals, managerial personnel and high and medium ranking administrative staff in both the public and private sectors. Since the late 1970s, the government's provision of low-interest loans to encourage home ownership among government servants has stimulated a strong housing demand. Local entrepreneurs, therefore, have been provided with opportunities to accumulate wealth by servicing them, not only in housing but also in catering, consumer goods and services. Also, Malaysia's private investment is constantly affected by the world economic climate. Between 1981 and 1985, for instance, the private sector's annual growth rate in investment registered only 1.8 per cent which was much lower than the 10.7 per cent projected (Government of Malaysia, 1986a:44).

Hence, frontier regions are economically dominated by national metropolitan and overseas centres which assume the major functions of commercial exchange. With little public and private industrial investment on the frontier areas, settlements within the Pahang Tenggara and Kesedar regions have remained agricultural in character. These agro-settlements are basic units of cash-crop production at the very source, from which most surplus is not kept for local reinvestment. Having explained why Pahang Tenggara and Kesedar have failed to reach their urbanisation and industrialisation targets, we can

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(i.e. 30 per cent reserved share to the Malays and other indigenous people) of the NEP (see Chee, 1986).
now proceed to study whether the resource frontier strategy has contributed in reducing regional disparity – a primary aim of the regional policy.

Resource Frontier Strategy and Regional Disparity

As part of Malaysia's regional policy, one of the main aims of the resource frontier strategy has been to help reduce economic disparity between more and less developed states. Basically, FELDA's efforts in transferring part of the population from depressed areas to unexploited frontier regions have contributed to the reduction of regional disparities in two ways. Firstly, the transfer leaves a higher ratio of resources to the remaining population with resultant higher levels of per capita consumption (Nilson, 1973:29). Secondly, the reception areas have been transformed into more productive zones both in terms of agricultural outputs and public facilities. The critical issue here, however, is the extent of success that has been achieved through the resource frontier strategy.

Overall, the extent contributed by the resource frontier strategy has been limited in terms of per capita gross domestic product since the launching of the NEP in 1971. As Table 7.6 shows, the gap between the east (Eastern region) and the west coast states (other regions) seems to have been narrowed. But a substantial part of the rise in per capita income of the Eastern region projected for 1990 is attributable to Trengganu's input in petroleum and natural gas. Kelantan's per capita GDP ratio to Peninsular Malaysia's average, however, has remained stagnant between 1971 and 1990 – less than 0.5. Pahang, the most important state for FELDA schemes, even experiences a widened disparity during the same period.

Since 1970, Penang has made substantial advances as it has been able to develop a series of industrial estates offering tax incentives and tariff protection for export-oriented manufactured goods and import-substitution industrial products for local markets. Contrary to manufacturing, the impact of agriculture in contributing to Malaysia's regional balance in terms of gross domestic product has declined. Agriculture's GDP
input decreased from 30 per cent in 1971 to 23 per cent in 1980, and is expected to drop further to 18 per cent by 1990 (Government of Malaysia, 1981:100-101; 1986a:190-191).

Therefore, because of the difficulty in creating secondary and tertiary occupations in the rural sector, the agriculture-based resource frontiers cannot help reduce the regional disparity to any significant extent, despite the fact that the public enterprises involved are more concerned with the provision of services and settlers' welfare (compared to the private sector).

Table 7.6

<table>
<thead>
<tr>
<th>Region</th>
<th>1971 (GDP)</th>
<th>1980 (GDP)</th>
<th>1990 (GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per Capita</td>
<td>PM(^a)</td>
<td>Per Capita</td>
</tr>
<tr>
<td>Northern</td>
<td>998.7</td>
<td>0.84</td>
<td>1,608.9</td>
</tr>
<tr>
<td>Central</td>
<td>1,763.4</td>
<td>1.48</td>
<td>2,248.1</td>
</tr>
<tr>
<td>Eastern</td>
<td>771.6</td>
<td>0.65</td>
<td>1,185.7</td>
</tr>
<tr>
<td>Southern</td>
<td>1,083.7</td>
<td>0.91</td>
<td>1,726.0</td>
</tr>
</tbody>
</table>

Note: Northern region comprises Kedah, Perlis, Penang and Perak; Central region covers Selangor, Kuala Lumpur, Negeri Sembilan and Melaka; Eastern region consists of Kelantan, Trengganu and Pahang; and Southern region includes only Johor state.

\(^a\) Ratio to Peninsular Malaysia given as 1.00.

Source: Computed from Government of Malaysia, 1981:Tables 5-1 and 5-2; 1986a:Table 5-7.

Definitely, however, the regional disparity between the west and the east coasts of Peninsular Malaysia would have been even larger without the resource frontier strategy. But given unrealistic projections in terms of population growth and expansion in secondary and tertiary activities, the strategy achieved little when evaluated against the national objectives and targets. Convincingly, the strategy has been successful in bolstering the production of agricultural commodities which have remained as one of the
primary foreign exchange earners for the country. Furthermore, Kuantan has benefited from the frontier development of Pahang Tenggara, despite the delay in the construction of seaport. Because of the relatively low purchase power of the settlers in the frontier regions and the east coast as a whole, the Kuantan port will be used mainly for exporting commodities for a long time to come. Meanwhile, the existing business network in Peninsular Malaysia is adequate to meet the demand for most of the consumer goods of the east coast states. This leads us further to examine the lessons of resource frontier strategy for the future.

3. LESSONS FOR THE FUTURE

Our case studies of Pahang Tenggara and Kesedar have shown that the resource frontier strategy has not been able to use commercial agriculture (oil palm, rubber) to initiate an urban-industrial take-off in the frontier settlements. Thus, we now draw some lessons from the FELDA experience. Three main issues are studied: sustainability, land availability and the future generation.

Sustainability

Sustainability involves two basic issues: (a) economic (i.e. living standards); and (b) ethnic. The first issue has to be seen against the rise in the living standards of FELDA settlers as a result of the government's direct high-cost assistance in public facilities, administrative staff and improved crop yields. In these circumstances, the most severe threat of sustaining FELDA settlers' living standards rests with the uncertainty of the commodity prices and the organisation's marketing skills. Disadvantaged by Malaysia's higher operating costs, FELDA is facing increasing competition from Indonesia and Thailand, two neighbouring countries which are expanding their oil palm and rubber acreage and, are also catching up with its much-vaunted oil palm technology. Yet in 1986, 70 per cent of FELDA's 682,000 hectares of crop area was under oil palm (FELDA, 1986:8) from which a substitutable edible oil is generated. Currently, the international palm oil market (60 per cent from Malaysia) is competing intensely with
other edible oils—most notably soybean oil. Consequently, any further improvement in
the living standards is problematical. Despite efforts undertaken to improve product
quality and to cut down production costs, Malaysia’s oil palm future is hard to predict.
Rubber, moreover, has declined in area during the last few years. Because of its need for
more labour input, rubber is unlikely to expand in the future.

The second issue is moral. As a public agency whose task is to help eliminate
poverty, FELDA’s target group is, however, strongly ethnic-oriented. More than 95 per-
cent of its settlers are Malays (Government of Malaysia, 1976:183). Conversely, few
poor from the Chinese-dominated new villages and Indian-dominated estates have been
offered places. Among the 1.8 million people of the new villagers in 1985, an estimated
half of them were living below the poverty line (Government of Malaysia, 1986a:91 and
based on Gibbon’s estimate). This contradicts the New Economic Policy’s objective of
eradicating poverty irrespective of race and eliminating the identification of ethnic groups
with geographical location. It is, therefore, a moral question whether FELDA should
continue to use public funds to support its settlers when their cash income falls below the
poverty line. Like many other resources, land is not unlimited. Thirty years of land
resettlement has simultaneously brought FELDA to face a new reality: suitable frontier
lands are running out in Peninsular Malaysia.

Future Land Availability

During the Fifth Malaysia Plan (1986-90), one-third of the 175,000 hectares of
new land to be developed by FELDA will be in Sabah (Government of Malaysia,
1986a:320). From 1990 onwards, the prospect of expanding large-scale commercial
agriculture will decrease in Peninsular Malaysia, not only because little suitable land
remains, but, in particular, the issue of conserving tropical forest is arousing increasing
concern. Concomitant with frontier clearance in the past thirty years, vast jungle cover
has been removed, having a severe environmental impact on the ecosystem: topsoil loss
and general land degradation (upstream erosion to downstream sedimentation). National
and international criticisms over Malaysia’s widespread damage of its environment (see
ICHI, 1986; Goldsmith, 1985; Brookfield, 1988; Barrow, 1980) have exerted strong pressure on any further large-scale deforestation in at least West Malaysia. In these circumstances, improving existing resettlement schemes and seeking other development alternatives have become increasingly important to policy-makers. Increasingly, extending the resource frontiers is not a viable option in Peninsular Malaysia.

The Second Generation and Planning Dilemmas

As noted, relatively few non-agricultural opportunities have been created in the frontier settlements to absorb the younger generation who averages more than four children per family. Initially, politicians and planners had thought of urbanising the frontier settlements so that the settlers' children could stay.

The settlers' response to the macro-level objectives set by politicians to urbanise them has been passive and inactive. Their view of a 'region' and urbanisation contradicts strongly with that of the politicians (Figure 7.2). Politicians have a notion of a definite region marked by boundaries. This is not observed by settlers and labourers. The politicians need Malay urbanisation as an instrument for converting their rural strongholds to urban settings. Although settlers are provided with urban facilities and services, their standards of living are constantly threatened by uncertain commodity prices. In times of low commodity prices and with increased responsibility towards the educational needs of their children, most of them can only meet basic needs. Their situation has not been conveyed to the planners because of the lack of communication.

Within their rural setting, the settlers adjust their livelihood and needs to the income levels and other social needs and enjoy the facilities through public investment initiated by politicians. But apart from their basic function of producing commodities, whether to industrialise and urbanise their rural setting is a distant matter. Apparently, they do not see a future for their children on the frontiers. While they themselves wish to stay on, their children are less likely to do so. With higher educational skills, the frontiers will be unable to retain most of them. In short, Malaysia's resource frontier strategy has not been
Figure 7.2

Conceptual Divergence Between Settlers and Politicians on 'Region'

Settlers and Labourers → Highways, Public Facilities and Services
Politicans

A: Formal procedures
- Top-down macro-level objectives
- Administrative regional boundary
- Imposed urbanised township.

B: Micro-level Reactions
- Bottom-up response
- Extraregional boundary
- Rural settlement adapted to income and needs.
an alternative to rural-urban migration and effective to industrial decentralisation – for
most settlers it has merely postponed the inevitable for a generation. But if most of the
children of settlers are unlikely to find a house on the frontier, where can they go?

4. RESOURCE FRONTIERS, URBANISATION AND THE NEP

We have shown that the resource frontier strategy has been unable to retain future
generations of settlers. The strategy, however, has induced urbanisation elsewhere. More
recently, the Malay population has been more migratory and has shown an increasing
trend towards greater urbanisation than the Chinese and the Indians (Government of
Malaysia, 1986b:24-25). By the year 2,000, this trend will be intensified as the fertility
rate of Malay women will be twice that of their Chinese and Indian counterparts
(Government of Malaysia, 1987:108). Hence, it is imperative to examine the trend of
Malay urbanisation and its relationship with frontier development.

Metropolitan Growth and Resource Frontiers

The relatively efficient frontier commercial crop development and linkage system
between producing regions and metropolitan towns (including ports) have accelerated the
primacy of Kuala Lumpur and the pace of tertiary activities. Since 1970, Malaysia’s
tertiary sector has expanded and remained at a high level in 1985, accounting for 36 per
cent of the total active population – a very high level by Third World standards.

The primacy of Kuala Lumpur (including its satellite – Petaling Jaya) has been a
recent phenomenon (Choo, 1978:332). Between 1970 and 1980, its population increased
substantially and widened the gap with the second-ranking city (from twice that of
George Town to four times that of Ipoh). In ten years, it recorded an unprecedented rate
of annual growth of 7.5 per cent (Table 7.7). As this Table shows, the change in urban
structure and the destabilisation of the rank-size system in Peninsular Malaysia have been
associated with large-scale frontier development. Initially, resource frontier development
required revenues for initial investment and infrastructure. These revenues were acquired
Table 7.7
Size, Rank Position and Annual Growth Rate of Thirty Major Towns in Peninsular Malaysia, 1947-1980 (in Thousands)

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<td>1.38</td>
<td>22.9</td>
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<td>2.21</td>
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Source: Salih and Young, 1981:128; and calculated from 'Government of Malaysia', 1986c.
through the growth of other national economic sectors. Being the nation's business and administrative centre, Kuala Lumpur possesses a strong financial position to enable it to supply the bulk of the credit and tax revenue used in the resource frontier regions. Benefiting from its control of financial flows and the linkages in material supplies, Kuala Lumpur is also involved in providing a large proportion of supplies to both FELDA and private estates within the frontier regions. Further, substantial tax revenues have been spent on development of the capital city. Thus, frontier development benefits the capital city substantially in creating demand, especially that of the high-order category and stimulating the growth of Kuala Lumpur.

By 1980, Kuala Lumpur and other metropolitan centres, with populations in excess of 75,000 people, had attracted most of the Malay rural-urban migration. They now accommodate 75 per cent of the Malay urban population (Mahbob, 1986:59). Between 1970 and 1980, the average annual growth of east coast metropolitan centres was most significant – Kota Baru recorded 12 per cent, Kuala Trengganu 10 per cent and Kuantan 12 per cent. The rate of Malay urbanisation accelerated, increasing from 27 per cent to 37 per cent of the total urban population of Peninsular Malaysia, whereas the proportion of other ethnic groups declined (Table 7.8). The annual growth rate of Malay urban population accounted for 6.7 per cent, a high figure compared to 3.7 per cent of Chinese and 4.2 per cent of Indians. By 1990, the percentage of Malay urban population (45.6 per cent) is expected to be higher than the Chinese (43.7 per cent). The fast pace of Malay urbanisation will encompass the youths from the FELDA settlements. Those from padi-growing and smallholding areas will also be numerous, as evidenced by the problems of idle land (569,000) hectares, See Nanyang Siang Pao, 25 November 1987). Consequently, the challenge of meeting the demand for jobs of an increased urban population is dramatic.

6 These three cities' boundary was expanded during the intercensal period from 1970 to 1980.
Table 7.8

Urban Population Change by Ethnic Group in Peninsular Malaysia (by Percentage), 1921-1990

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<th>1957</th>
<th>1970</th>
<th>1980</th>
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% Urban to Total Population 14.0 15.1 15.9 26.5 28.8 37.5 41.1

Total Population (Million) 2.91 3.79 4.91 6.28 9.15 11.47 12.97

Note: Figure within brackets indicates percentage of total population.
<sup>a</sup> Projected figure.
<sup>b</sup> The sharp decline was a result of the Malayanisation policy in employment following the independence in 1957.


Meeting the Challenge of the 1990s and Beyond

The Malay rural-urban migrants have been attracted at two levels. The higher echelon has been drawn by the expansion of modern activities and public services. Conversely, the lower echelon has been absorbed with the growth of informal and industrial activities in major cities in the Kelang Valley, Penang and Johor Baru. Between 1970 and 1980, the Kelang Valley grew by over 100 per cent in manpower. Some 465,000 jobs were created in the process (Government of Malaysia, 1981:111).

Indeed, in Peninsular Malaysia, a dramatic change in ethnic structure of manpower in manufacturing has taken place. The proportion of Malay labour force involved in this
sector had increased from 20 per cent in 1957 to 54 per cent in 1980 (McGee, 1986:47).
Large numbers of Malay female workers have also been absorbed into the export-oriented manufacturing sector of the major towns, characterised by low wage and low skill requirements (Mahbob, 1986:92). Most of the Malays in these cities, however, are concentrated in services and small-capital businesses and other labouring jobs. Other towns, with a population of less than 75,000, registered a smaller growth in employment.

Thus, our study indicates that the frontier development has contributed little towards urbanising the Malays in situ but it has helped accelerate their urbanisation in Kuala Lumpur and other metropolitan cities of more than 75,000 people. But the FELDA frontier settlements have played a strong role in intercepting a large number of potentially urban-bound migrants from the poorly developed rural regions. By delaying the rural-urban influx, the eventual second-generation migrants from the FELDA schemes will provide a better quality of labour force with a higher educational standards and ability than their parents. Therefore, they will find adaptation to urban life elsewhere easier.

In response to the limited expansion of growth centres and townships in the frontier regions, the Fifth Malaysia Plan (Government of Malaysia, 1986a:198) has retreated from the offensive front launched in 1970 and reoriented the strategy:

'The new townships of regional development authorities will be developed as settlement centres and allowed to follow their natural growth process rather than as artificially induced small-scale version of existing major cities. Facilities such as urban infrastructure and buildings will, therefore, be constructed with minimum cost ... and upgraded according to effective demand and the standards of living of the population'.

The Fifth Malaysia Plan has also realised the disadvantages of industrial dispersion over vast territories. A return to the neo-classical emphasis of agglomeration economies has been made clear and privatisation has also been stressed. What then are other alternatives to replace the resource frontier strategy beyond the 1990s? This question will be considered in the next chapter.
Resume

In assessing the effectiveness of the resource frontier strategy in tackling the NEP's two main objectives, our findings indicate that poverty has been eliminated within FELDA schemes, in spite of uncertainty caused by pronounced fluctuations of commodity prices. Nonetheless, this has been achieved by a high-cost approach and at the expense of the poor among other ethnic groups. Yet, the beneficiaries seem to be restricted to first generation settlers. Relatively few jobs have been generated to absorb second generation youths. Based on evidence collected in Pahang Tenggara and South Kelantan Development Authorities, the use of the resource frontier strategy to promote non-agricultural activities has achieved little. The FELDA settlers and other labourers still remain basic producers of agricultural commodities. It has reduced scarcely the regional disparity between more and less developed states but it is recognised that the gap would have been even larger without it. Indeed, the restricted growth of these frontier settlements reflects the logic of the world market system and the flow of private capital. Consequently, the limited improvement experienced by settlers is mirrored in the restricted ways in which the resource frontiers have stimulated regional and urban development. The frontier development has induced urbanisation elsewhere in the metropolitan centres. These centres which enjoy agglomeration advantages and more direct linkage with world centres are privileged in their share of national growth. In the FELDA settlements, the children of the settlers have now been educated than their parents. They are potentially urban-bound migrants and will be better equipped with skills for metropolitan life. Chapter 8 will examine other alternatives to the resource frontier strategy.
CHAPTER 8

WITHER MALAYSIAN DEVELOPMENT?

Resource frontier development in Malaysia has generated a surplus. Yet, it has failed to induce urbanisation. Instead, much of the surplus has leaked from the resource frontiers to the metropolitan areas and bolstered their growth. These stark facts raise the issue of the nature and direction of Malaysia's development over the next twenty years.

But first a series of questions have to be addressed: can the resource frontier strategy be replaced by other strategies to seal the leakage of surplus; then what other strategies are available; and what is most needed for Malaysia under present circumstances?

In taking up these issues, a wider perspective in relation to current regional development theories is considered by referring to a full spectrum of alternatives whose range varies from a completely open economy to a closed one. Hence, we outline three basic strategies available to Malaysia and examine their theoretical features in turn (Section 1). Then we compare and critically analyse the agropolitan and integrated rural development strategies. Attention is focused on whether they fit in Malaysia's political framework and the actual conditions of Pahang Tenggara and Kesedar (Section 2). Finally, we examine the most likely alternative, the industrialisation option, and speculate on the problems and feasibility of the export-oriented strategy in absorbing surplus labour including that of the frontier regions (Section 3).

1. THREE STRATEGIES

Basically, three strategies are available to Malaysia. At one extreme, as shown in Figure 8.1, the country can turn away from the resource frontier strategy towards a closed economy by following the agropolitan approach. Alternatively, the country could
shift to the other extreme of an open economy by pursuing either an integrated regional development strategy or manufacturing industrialisation approach. But these options differ in spatial terms. While the integrated regional development strategy will have to be applied on the resource frontier, the manufacturing strategy makes best use of the locational advantage available in the country as a whole and hence is not site specific. Although there are wide variations within each approach, we ignore these subtleties to provide the starkest outline of each approach.

Agropolitan Development

As a means of eliminating leakage of surplus, the agropolitan approach aims at protecting autonomous territories or regions from being exploited by the world exchange system. This approach, indeed, was a product of two main streams prevailing in the 1960s and the early 1970s: dependency theory and the Chinese commune model. While the dependency school launched a fierce theoretical attack on the world market system, the people's commune model advanced concrete measures to achieve self-reliance. Before exploring whether agropolitan theory could be adopted to refine Malaysia's
resource frontier strategy, there is a need to briefly examine dependency theory and the
gregopolitan theory itself.

The dependency school perceives that the international exchange system operates to
the advantage of capitalist core countries. According to Frank (1966), international trade
creates underdevelopment in developing countries within a global metropolis-satellite
framework. Consequently, the dependent economy is prevented from realising its own
potential surplus. Taking Latin America as an example, Frank quoted evidence that the
continent was able to achieve a higher rate of development when the metropolis was at
war or in economic crisis. As soon as the ties in trade and investment were resumed,
Latin America's efforts towards economic independence were 'choked off'. Other
dependency theorists — Furtado (1972), Dos Santos (1970), Sunkel (1969), Santos
(1979) and Amin (1974; 1976) — basically suggested that multinationals are spearheads
of capitalist core countries which constantly seek 'geographic specialisation' within the
international division of labour. To an extent, they bring modernisation but not genuine
economic development. Where limited development is possible in the periphery,
dominance remains at the centre. Spatially, they consider that secondary centres in the
periphery facilitate the diffusion of foreign capital and modernisation. The benefits,
however, are restricted to a small community of elites.

Parallel to this attack on the world exchange system, an alternative seemed to have
been found by some Western intellectuals from the Chinese commune system which
emphasised self-reliance and basic needs. Notably, the commune system did not depend
much on exports. The growth centre policy — a tool for spatial domination — had no role
to play because China was taking the rural autonomy and 'low-energy' approach. This
concept, in some ways, was in accord with the 'Club of Rome' which attacked on
resource wastage and depletion, pollution and worldwide energy crisis (see Meadows et
al. 1972; Schumacher, 1974; McRobie, 1981). In the pursuit of equity and balanced

1 implemented at the height of the campaign called 'The Great Leap Forward' in 1958 and abolished in
1980.
regional growth, locational advantage, generally able to provide higher aggregate output, was also discarded. Instead, a 'full' employment policy was adopted as a major development objective. Apparently, self-reliance was an explicit expression of independence, self-confidence and basic needs. It relied on the capacity of people themselves to invent and generate new resources and techniques, increase capacity to absorb them, put them to socially beneficial uses, master their own economy and have their own way of life (Galtung, 1980).

This self-reliant strategy had a strong influence on the emergence of a heavily agricultural-based or 'agropolitan' approach (Friedmann and Douglass, 1975; Friedmann and Weaver, 1979; Friedmann, 1987). In 1975, Friedmann and Douglass promulgated agropolitan theory. Initially, it was a direct response to ecological constraints, to the human needs and problems of 'dualistic dependence' of the Third World, intensified by the world capitalist economic crisis provoked by oil embargoes at the end of 1973. On the basis of self-reliance, agriculture was seen as a leading or 'propulsive' sector of the economy. Later in 1979, the theory was further developed to include the concept of selective regional closure of Stohr and Todtling (1977). In order to filter out the negative 'backwash' effects and to retain the positive 'trickle-down' effects, selective spatial closure was introduced to promote territorially organised (horizontal) units and defy the functionally organised units so that some decision-making power from the top are devolved (Friedmann and Weaver, 1979:35).

In terms of spatial organisation for agropolitan development, Friedmann dismissed the growth centre concept he once proposed in the 1960s. As an alternative, he introduced certain adapted elements of urbanism to rural settings, so as to establish a 'city in the fields' or 'agropolis'. Extrapolating from the agropolis is the agropolitan district which is a larger socio-economic and political network for social interaction. The labour force within the district is to be directed towards an intensified development of natural resources. Industries should be agriculturally-oriented. The agropolitan district is linked
with the regional network including larger towns by physical channels of communication. The regional town is of higher order in the urban hierarchy.

Administratively, the agropolitan district is to be managed on the basis of self-government, with the local population to decide their own affairs. It is an integrated, self-ruling unit with sufficient autonomy and economic resources to plan and implement its own development, while receiving necessarily financial, material and technical resources from the central government.

In practice, Friedmann and Weaver (1979:189-190) warn, however, that this 'territorial power', if achieved, will need most of the world's population to live at unacceptably low levels of material consumption and to engage in production outside the exchange economy. This is understandable in that the centre of the capitalist world is overwhelmingly in control of technological expertise and innovations.

Not surprisingly, many critics emerged following these proposals. Richardson (1978:137) asserted that Friedmann's approach was not feasible because it recommended communal ownership of land, and self-government on a local level, which was unlikely to be acceptable to the mostly authoritarian Third World regimes. The strategy has also been under fire on other fronts. It has been dismissed as an attempt to 'leave the countries of the world periphery forever mired in rural backwardness', as a 'failure to come to grips with political and economic realities', 'utopian', and characterised by 'superficiality, if not naivety' (Friedmann, 1985:156). Also, Friedmann (1985:155) acknowledged that agropolitan development, as a political strategy, 'requires a commitment on [the] part of national elites, and this may be difficult to obtain'. Recently, Friedmann (1987:383) has become even less confident about the feasibility of the agropolitan strategy in recognising the persistent influence of capitalism amidst the crisis in a large number of socialist countries:

'Global interdependency is not likely to unravel. It is capitalism's chief legacy to future generations. At some point, we will have to acknowledge the connection that inevitably links the smallest political community to the largest, the household to the world.'
Parallel to such criticism of Friedmann, China has abandoned the commune model in the early 1980s because of its problems of collective efficiency and for bringing the Chinese agricultural economy to the 'brink of collapse' (Hung Chi (Red Flag), 1979, 6, p. 2). Also, Frank (1984:176-180) – a one-time champion of the dependency school – became disenchanted with complete spatial closure as a result of the disastrous attempt by the Khmer Rouge in Kampuchea to promote a 'pure agrarian society'.

Thus, the agropolitan approach has evolved in a climate where intellectuals of the late 1960s and early 1970s were disillusioned with worldwide energy wastage, the dichotomy between developed and less developed worlds, and their hope for a more equitable society. With an emphasis placed on basic economic production at the village level, the approach offers a more equitable distribution of resources to community members. But by isolating from the world economy and shifting to food crops, it would likely bring lower standards of living to countries which have a strong reliance on exports. The approach also requires substantial power decentralisation to the local level, a demand hardly acceptable to many developing countries where cohesive force is still badly needed to bind their national territory under one sovereignty. With the review of Friedmann and Frank on the practicability of the agropolitan approach, we now move on to the other end of the development spectrum to examine a markedly different alternative of Denis Rondinelli.

The Integrated Regional Development Strategy

Of the two open-end strategies suggested earlier, we now review the integrated regional development approach because its neo-classical orientation can be easily adapted to Malaysia's prevailing political economy. If proven appropriate, there would be little problem in applying it in the country as political objection can be expected to be minimal. This strategy has been developed since the mid-1970s by the United States Agency for International Development (USAID) as an alternative to help alleviate rural poverty in the Third World. It has also been adopted by the World Bank and other international aid agencies. Its influence has now been widespread through the whole developing world.
Aiming at spatial integration of an ordered settlement hierarchy, this strategy is best represented by the works of Denis Rondinelli (1980; 1982; 1983; 1984; 1985; Rondinelli and Ruddle 1976; 1978).

Rondinelli's concept was derived from Johnson's (1970) idea focused on better integration between farm produce and the market. Through the creation of an integrated 'economic functional area' between the rural market town and the consuming urban centre, benefits should, in theory, trickle down to the small farmers. Rondinelli developed Johnson's model further. Rondinelli's primary concern, however, was the poor access of farmers to goods and services, which widened gaps between rich and poor regions in developing countries. Hence, he asserted:

'Uneven access to productive resources, social services and physical facilities ... poorly articulated and badly integrated spatial systems in which a vast, sprawling primate city or a few major metropolitan centres have little or no productive relationship to the numerous small villages and hamlets scattered over the rural landscape' (Rondinelli and Ruddle, 1978:39).

To better integrate the lagging rural economy with the national centres, he argued that there was a need to establish a three-tier hierarchical system in the rural region: rural service centre, small market town and the regional centre. This, he hoped, would remove the bottlenecks of service delivery from more important urban centres and the export of agricultural surplus from the rural region to the consumers in the cities, thus creating an 'integrated system of production and exchange' or the 'functional linkages'.

Later in 1980, from an empirical study in the Bicol River Basin of the Philippines, Rondinelli reached some conclusions on rural regional development. First, he noted that the traditional 'growth centre' approach could only exacerbate rural and urban differences within regions without linkages to the scattered villages (Rondinelli, 1980:41). Second, he saw the importance of decentralisation of investment capital from primate cities and metropolitan centres to less developed regions where rural industrialisation and infrastructure have to be promoted. This included farm-to-market roads, all-weather arterials from market towns to other larger towns and cities. Hence, agribusiness, small
and medium-scale industries and local consumer goods using indigenous materials could be stimulated. But he did not foresee how local entrepreneurship should be developed nor how private capital could be attracted from outside, especially from the metropolitan centre (Manila). Indeed, he realised from the study there was a large gap in infrastructure and other capital investment between a primate city and a distant economically marginal region such as the Bicol Valley Basin. This gap had to be filled up by secondary cities, without which diffusion of innovation, goods and services would not reach the rural poor. Realising this problem, Rondinelli (1983:12) went on to discuss the importance of secondary cities by working on the assumption that:

'a system of functionally efficient intermediate cities linked to larger and smaller urban centres and to a network of rural service and market towns can make an important contribution to achieving widespread economic growth and an equitable distribution of its benefits'.

In 1984, looking at the national urban network, Rondinelli shifted from decentralisation and diffusion over vast geographical areas stressed earlier to 'mutually beneficial linkages' between rural and urban sectors. The focus seems to have been narrowed down to linkages between a large metropolitan city and its nearby rural regions (Rondinelli, 1984:1-5). Only through urban support, he asserted, could the rural region can advance more rapidly. But are Rondinelli's ideas valid for Peninsular Malaysia? Before taking up this investigation, we have to discuss the third strategy – industrial development as an alternative.

**Industrial Development**

Industrialisation has long been the common aspiration and objective of developing nations especially since the end of the Second World War. Industrial activities not only can absorb an expanding labour force, but also have the potential of achieving a higher rate of growth and therefore higher standards of living. But the basic issue remains how to industrialise within a world exchange system where technology and trade are controlled by the core capitalist nations.
With limited financial and technical resources of their own, developing nations have to set priorities in their industrial undertakings. Almost without exception, import-substitution industrialization has been an inevitable phase because of the accustomed habits of consumption amidst the local population. Domestic production can most easily be made on existing consumption items (Cukor, 1971:94). The import substitution strategy allows developing countries to produce manufactured goods for domestic consumption previously imported from abroad. Hence, not only is foreign exchange saved, it also provides favourable market conditions to local firms by imposing tariff protective measures. But there are also disadvantages. First, because of the limited market and relatively low purchase power of local population, the expansion of import-substitution development will quickly reach its floor level. Further expansion will have to depend on an export market. At this juncture, the problem begins to arise when international competition comes into play. There is no automatic transition from production for domestic market to that for export. With higher costs of production because of relatively low level of productivity, many products of developing countries tend to be more costly than those made in advanced countries. Yet, key markets of these products are located in more advanced countries.

The complexity of transition from import-substitution industrialisation to export-led industrialisation can be explained using a neo-classical and structural approach (Kirkpatrick and Nixson, 1983:14-26). The critique put forward by neo-classical theorists focuses on the inadequacy of implementation, protective measures and inefficient use of comparative advantages. The structuralists or dependency theorists, however, pinpoint the origins at the market structure and the highly uneven income distribution in developing societies. Despite the differences in interpreting the 'failure' of import-substitution as a means of achieving industrialisation, both schools do not ignore the benefits of an outward-looking strategy. The neo-classical theorists, in particular, envisage that export promotion would bring significant changes in aggregate growth in developing countries. The key strategy, however, relies on how developing nations fit
themselves into the world market structure, making full use of their comparative advantage.

Since the 1970s, much progress has been achieved in some Asian countries by pursuing an export-oriented industrialisation strategy. Having a similar open economy, Malaysia's problems and potential in adopting such a strategy will be studied. First, however, we need to examine whether the agropolitan approach and integrated regional development strategy are appropriate as alternatives of development in Pahang Tenggara and Kesedar.

2. ALTERNATIVES FOR MALAYSIA?

The three alternatives discussed above need further examination to determine if they are feasible within Malaysia's socio-political framework. This is important because strategies will remain plans of actions if they are not supported by ruling political parties.

Overall Inappropriateness of the Agropolitan Approach

The agropolitan approach stipulates a wide range of conditions. Some compatibility is found between this approach and the FELDA organisation, clearly reflected in the organisation of production units. While the agropolitan approach promotes 'social power' of the rural residents in determining their daily affairs (Friedmann, 1988:216-217), FELDA has identical organisations known as the JKKR and the 'block system'. Under a centrally guided system, FELDA settlers enjoy certain democratic rights by selecting their own 'block leaders'. Through 'block leaders', the problems are passed on to the FELDA management and corrections made. In compliance with their traditional mutual help system (gotong royong), settlers within a common block work in a team. The return from harvest is basically shared among members consisting of twenty to twenty-five individuals. As our findings show, settlers have been capable of responding positively to this central guidance. But there are many incompatibilities if the agropolitan strategy is applied in Pahang Tenggara and Kesedar.
First, the basic needs concept which the agropolitan strategy stresses implies direct consumption of food the rural residents produce. Only surplus is sold to the market. Pahang Tenggara and Kesedar, however, have opted for cash crop production (oil palm and rubber) and relatively little food is grown locally. Much of Kesedar's land, moreover, consists of hilly terrain unsuitable for growing food. Consequently, FELDA settlers meet their basic needs through purchasing the necessities from outside the regions.

Second, Pahang Tenggara and Kesedar are two regions involving the interest of a varied group of people: state estates, private estates, smallholders and, most significantly, the FELDA settlers. Agropolitan strategy demands collective land ownership, a crucial issue in conflict with the basic principle of FELDA schemes and other interest groups. The desire of FELDA settlers for individual land titles has always been strong as land has been a key factor attracting them to join the schemes. Indeed, it is so strong that the government was forced in October 1988 to abolish the 'share system' after introducing it in 1985.

The third issue is technical. It is impossible for Malaysia to consume all its cash-crop produce of the resource frontier regions without exporting it. It may be possible to change part of the present cash crops to food crops. But this is likely to lower the living standards of the frontier residents - a risk which political elites will not consider. Furthermore, practical problems would likely arise if FELDA settlers are allowed, at least at the present stage, to manage their land, water and energy resources. Without adequate help from the government authorities, such management is likely to be sub-standard, resulting in a fall in crop yields².

Fourthly, effective administrative devolution recommended by the agropolitan strategy seems difficult as experience in the past has indicated that technical expertise has

² This view was expressed by an experienced FELDA regional manager in Gua Musang (based on interview in January 1988).
been always inadequate at local and regional levels. Moreover, Malaysia has a strongly centralised federal system which empowers the central government to have full control of all revenues and monies received through taxation and other means. Regional programs have to depend on federal funding which has a strong political orientation. Yet, fund allocations have long been based on federal-state relationships and subject to the influence of key political figures of the ruling parties (Nik Mahmood, 1984). Such constraints emerge often in the process of implementing regional projects within individual states. Consequently, it can be foreseen that the extent of administrative devolution may have to be subject to not only available allocations but the preference of location considered as top priority. With these constraints in adopting the agropolitan approach in Malaysia, attention is now turned to the open end of the development spectrum.

Inapplicability of Rondinelli's Strategy

The integrated development strategy also has many problems if applied to Pahang Tenggara and Kesedar. Our case study shows that these two planned regions are dependent upon oil palm and rubber, whose market is strongly international. Except for a small proportion of smallholders (less than 6 per cent), the two commodities are handled directly by the state-sponsored and private estates for their processing and subsequent sale outside the regions. Thus, the three-tier settlement hierarchical system defined by Rondinelli is inappropriate. Above the rural service centre, there is a missing link to the regional centre. The market town does not exist because it is not required. Consequently, the designated regional centres in Muadzam Shah and Gua Musang do not process or handle settlers' produce. Further, the rural service centres like Bandar Tun Razak and Ciku can satisfy the settlers' in many aspects in the light of their relatively low income levels.

In his research, Rondinelli has assumed the existence of very low standards of infrastructure and road communications in developing countries. The case in Peninsular Malaysia is quite different. In fact, except in remote villages still dominated by
subsistence agriculture, Peninsular Malaysia possesses a far superior infrastructure and facilities than in most other developing countries. Such an advantage allows rural commodities to be efficiently exported to the international market via metropolitan towns with a population of more than 75,000. This operates at the expense of most small and medium-sized towns. Earlier, Osborn (1974) conducted a study on the Malaysian middle cities where he observed that the country's high-standard transportation systems had provided dynamism to some major centres. But at the same time they had also depressed the production sub-systems in some other smaller, less central and agriculture-oriented centres. A similar remark was made by Lee (1979:57) relating to some Malaysian small towns which declined because they could not assume the role of a market town. Hence, because of the internal economic structure, the material handling system, and their international linkages, an efficient infrastructure linkage system works not necessarily in favour of small and secondary towns as Rondinelli has argued.

An identical phenomenon also emerges in regions where there is a combination of food and cash crops. In a study undertaken by Cheng Ban Lian in Kedah (see Salih, 1978:142-144), it was found that the distribution function of small towns was restricted. From the upper-level centres, these small towns received consumer goods but they did not provide any goods in return. Cheng gave two reasons. First, rubber and rice marketing channels bypassed them and second, traditional artifacts had declined because cheaper urban manufactured substitutes had been more competitive. Thus, in order to benefit from an agriculture-based region whose nature resembles that of Pahang Tenggara and Kesedar, a secondary city should have a highly competitive base to supply a range of goods and services needed by residents of that region. In this sense, Segamat, Bahau and Gua Musang have largely benefited.

Rondinelli also has a strong belief in the diffusion of innovations. This diffusion is considered to pass down from the main city and eventually modernise the rural towns and raise their productive capacity. It has been true insofar as agricultural productivity is concerned. The nature of the resource frontiers, however, confines the diffusion mainly
agriculture as the conversion of agricultural innovations into non-agricultural entrepreneurship has proved to be difficult, though the latter is essential for urbanisation. It is, therefore, not surprising to observe that industrial development within Pahang Tenggara and Kesedar is merely confined to resource-based plants. As our findings show in Chapters 6 and 7, rural industrialisation in the frontier regions had not worked to any significant extent. The rural settlements remain basically dormitory quarters of settlers engaged in producing raw materials. The great majority of the second generation youths have to be absorbed outside Pahang Tenggara and Kesedar.

In sum, both the agropolitan approach and integrated regional development strategy are not appropriate for refining Malaysia's resource frontier strategy. Another alternative, therefore, needs to be found outside the frontier regions so as to absorb the surplus population from the frontier regions. The exodus to existing metropolitan and smaller centres is expected to be substantial in the next twenty years. Industry is a reasonable choice.

3. THE INDUSTRIALISATION OPTION

Resource frontier development has approached its final stage in Peninsular Malaysia. There is little suitable frontier land left for further expansion and the pressure for land conservation has also grown stronger for ecological reasons. Older established resettled zones, moreover, have ceased to be frontiers in the passing of time. Frontier expansion has almost come to a halt. Neither the agropolitan nor the integrated regional development strategies offer Malaysia much hope for future development on its frontiers. As such, industrialisation within existing centres looms as a real alternative for tackling the country's continued problems of poverty and demand for job opportunities in the near future. As an option in an open economy, manufacturing industrialisation fits into Malaysia's 'state-capitalist model' (White, 1984; McGee, 1986), and it is also an acceptable option for the present system of government.
Malaysia's recent industrial development has been impressive, marked by its growth in value added – an annual growth rate of 12.5 per cent was recorded between 1970 and 1980 (Government of Malaysia, 1981:294). The impact has been so substantial that the country can now be considered a near-industrialised nation joining Asia's four newly industrialised countries (NICs) of South Korea, Taiwan, Hong Kong and Singapore (McGee, 1986; Ariff and Hill, 1985). From Independence in 1957 to the mid-1970s, industrial growth was chiefly derived from import-substitution and the expansion of domestic demand in consumption, intermediate and capital goods. Since the mid-1970s, however, the backbone of Malaysia's industrial growth has shifted to consumer durables and, increasingly, has been infused with the export-oriented industries which are largely foreign-controlled. Three key questions need to be raised: what is the potential for labour absorption in industry; what are the constraints and prospects of a deepened industrialisation; and what are the implications of industrialisation for regional development? Before any answers can be given, we have to examine the structure of industry in the country.

Present Structure of Industry

On the basis of ownership, there are three types of industry in Malaysia: indigenous private-owned small industry, state-owned large and heavy industry and, foreign-induced export-oriented manufacturing industry.

A small industry is a manufacturing firm which has fixed assets of less than $500,000 or engages less than 50 full-time workers (Chee, 1986:3). The 'Incentive Act of 1958' promoted import-substitution and had helped the domestic small industry expand substantially through the 1960s. Given the nature of this industry\(^3\), its products are mainly for domestic consumption. Few (less than 10 per cent) have potential for the export market because its relatively inferior quality, production costs and prices are not

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\(^3\) Most of the firms are small and are involved in rice mills, manufacture of spices, curry powder, brooms, brushes, cooking oils, ice, furniture, wooden and can containers, wood and cork products, lime, plaster, non-metallic mineral products, motor vehicle bodies, noodles, confectionery, chocolate, bakeries, rubber products, basic metal, garments and other manufactures.
competitive (Chee, 1986:30; FEER, 14 February 1985). In 1982, small industries with less than 50 employees engaged some 118,000 workers. Despite the capacity for generating employment, owners of small industries are normally not looked upon as 'entrepreneurs' but little more than 'backyard workshop operators'.

In sharp contrast to the small enterprises are heavy industries backed by substantial state capital. Basically, the government's large-scale industries were initiated in the mid-1970s, and the creation of Heavy Industries Corporation of Malaysia (HICOM) in 1980 marked the launching of a fully state-owned heavy industry. In an attempt to create a broad indigenous heavy industrial base by the end of the century, HICOM aims at a long-term program to transform radically the national economy highly dependent upon a vulnerable commodity cycle. By September 1983, total federal investment in heavy industry was $3 billion, largely supported by oil revenues and international loans (FEER, 15 September 1983; 14 February 1985).

The third type of industry is basically foreign-owned or controlled. Before the introduction of the Free Trade Zones (FTZs) in the early 1970s, foreign industries used, on the whole, low levels of technology for producing food, beverages and tobacco, and basic metal products for domestic consumption (O'Brien, 1989:3). Since 1972 however generous incentives and the provision of free trade zones, industrial estates (IEs) and licensed manufacturing warehouses (LMWs) began to attract footloose multinational industries to Malaysia's strategic points near to the ports in Penang, Melaka, Selangor and Johor.

By early 1984, there were 96 industrial estates and 8 free trade zones in the country, producing more than half of total manufacturing exports – with interest focused on electronics and electrical industries as a result of an international shift of locations from technologically more advanced regions. All the above three types of industry,

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4 Firms in the free trade zones are entitled to duty-free imports of raw materials and capital equipment, concessions in land and tax duties, and relaxed customs formalities.
however, have their constraints and prospects affected by either domestic policy or the international investment climate.

**Current Constraints and Prospects on Malaysia’s Industry**

The small industry is labour-intensive, engaging an unskilled or semi-skilled labour force. Such enterprises are mainly run as family businesses and mostly owned by ethnic Chinese. Since 1970, within the strongly interventionist nature of the NEP, the share of production of small industry has reduced. In contrast, firms with fifty workers or more have expanded in proportion both in employment size and gross output (Ariff and Hill, 1985:167).

About 80 per cent of the 17,000 manufacturing firms in the country are in the small industry category (O’Brien, 1989:8). Constrained by their weak position to compete overseas, the Industrial Coordination Act of 1975 and lack of modern equipment, many Chinese firms choose to remain small or divert their capital to other businesses. Indeed, a substantial number of small machinery and engineering enterprises traditionally closely associated with large industries have stagnated (*FEER*, 14 February 1985). State-owned heavy industrial plants, being capital intensive, have the disadvantage of providing relatively few jobs. Because of a premature focus on heavy industry, inefficient allocation of resources affecting other resource-based industries has resulted (Ariff and Hill, 1985:235). Also, the state-run heavy industry has shunned low or medium technology. Other public enterprises have been created primarily to provide top-level managerial jobs to Bumiputras and to prepare for future take-over of equity shares acquired either from foreign-owned corporations or established with public funds. Highly protected and short of management skill, they have yet to perform well. Like local big private entrepreneurs, they have not been actively involved in the manufacturing of

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5 On 24 October 1986, the Act was relaxed. Only industrial firms with 75 full-time employees and above or a paid-up capital in excess of S2.5 million were required to have a license (i.e. need to have a share holding of at least 30 per cent for the Malays and other indigenous people.)

6 Estimated to be more than seven hundred of them.

7 Literally means ‘sons of the soil’—Malays and other indigenous people.
low and medium technology. Their interest has been focused on acquisition of shares in the corporate sector and areas where wealth accumulation is faster than manufacturing.

The foreign-induced export-oriented industries accelerated after the mid-1970s. World trade recovery since 1987 has brought substantial foreign investment to Malaysia's electronics industry, notably from the United States, Japan, Taiwan and Singapore. In 1988, largely because of the electronics industry, manufacturing became the largest foreign exchange earner (Table 8.1), and Malaysia is now the largest producer of semi-conductors outside Japan and the United States. The same year also saw the value of manufacturing exports achieve a record-high level, reaching nearly $27 billion or almost half of the total export value. Nonetheless, our main concern is: how good is its potential in labour absorption?

Table 8.1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>11.1</td>
<td>20.6</td>
<td>32.8</td>
<td>48.6</td>
</tr>
<tr>
<td>Rubber</td>
<td>33.4</td>
<td>17.1</td>
<td>7.6</td>
<td>9.5</td>
</tr>
<tr>
<td>Forestry(^a)</td>
<td>16.3</td>
<td>12.9</td>
<td>10.3</td>
<td>10.5</td>
</tr>
<tr>
<td>Palm oil</td>
<td>5.1</td>
<td>9.1</td>
<td>10.4</td>
<td>8.2</td>
</tr>
<tr>
<td>Crude petroleum</td>
<td>3.2</td>
<td>25.3</td>
<td>22.9</td>
<td>11.1</td>
</tr>
<tr>
<td>Other(^b)</td>
<td>30.9</td>
<td>15.0</td>
<td>16.0</td>
<td>12.1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Value ($ Million)</td>
<td>5,163</td>
<td>28,445</td>
<td>38,017</td>
<td>55,334</td>
</tr>
</tbody>
</table>

Note:  
\(^a\) raw log and saw timber  
\(^b\) tin, cocoa, copper, canned pineapple, gold etc.

Despite huge foreign investment and expansion in the electronics industry, there is no assurance of sustainability. The current boom has been a result of several factors: soaring land prices in Japan and the NICs, multinational globalisation strategy (Nakajo, 1980; Chen, 1987) and the appreciation of the yen. The situation could be fragile once the boom is over as multinational capital is very mobile. Malaysia's present comparative advantages may be lost when other neighbouring countries offer better conditions of investment. Moreover, little transfer of technology has been achieved – Malaysian workers are primarily engaged in low-skilled labour intensive production (O'Brien, 1989:13; Chee, 1987). They absorb, in fact, only a small part of the whole semiconductor manufacturing. Further, the potential of employment generation in the electronics industry and linkage with local economy remain relatively small. Thus, constrained by conditions of labour quality and other urban infrastructure and services, there is no foreseeable scope for future foreign investment in the frontier regions like Pahang Tenggara and Kesedar.

Hence, the recipe of industrialisation has to be sought at home. The government can assist in inducing local capital to invest in manufacturing using resource-based materials and, at later stage, in the high technology. As Kamal Salih argued, the public sector must not just create 'a narrow band of tycoons living off investments' (Straits Times Weekly, 21 January 1989). Speaking on the Malaysian Incorporated Concept in 1983, Mahathir, (Mohamad Nor et al, 1984:4-6) – Prime Minister of Malaysia – also noted that the public enterprises had more responsibility than the creation of jobs:

"The government cannot forever run [business] institutions in order to sustain or create employment ... Malaysia's future depends on improved productivity and the ability to sell more and more goods to the world."

---

8 In 1982, despite an export value of $4.7 billion, the total employment generated in the Free Trade Zones and the Licensed Manufacturing Warehouses accounted for only 97,630 jobs or 12.3 per cent of the manufacturing sector. It also used less than 5 per cent of materials from local sources (Warr, 1986:189-194).

9 Executive-director of the Malaysian Institute of Economic Research, a think-tank for the government.
In his foreword to the 'Mid-Term Review of the Fifth Malaysia Plan' (Government of Malaysia, 1989), Mahathir promised to reduce the role of the government in commerce and industry, and stressed that the main source of economic dynamism should come from the private sector.

With a very open economy, Malaysia's future will be strongly associated with international trade. This implies that a firm commitment to productivity is needed, and locations with the best conditions will have to be chosen for industrial activities. Clearly, such a strategy will have severe consequences and is likely to lead to spatial polarisation. But there are also positive results – more ethnic integration in existing metropolitan centres as a result of the exodus from mono-ethnic rural regions such as Pahang Tenggara and Kesediar. Furthermore, in terms of poverty eradication, a more rapid industrialisation process will create more resources which could be used for less favoured groups, irrespective of ethnic origins and whether they are from rural or urban areas. Thus, the way forward for Malaysia will be an accelerated industrialisation, concentrated in areas with locational advantages.

Implications for Regional Development

Having accepted that industrialisation should be located in places enjoying comparative advantages (basically in the present cores) instead of where it is most needed (the periphery), a new issue arises: what impact will this industrialisation have on regional development and the frontier regions of Peninsular Malaysia; are we suggesting spatial polarisation as a preferred model to the welfare-oriented redistribution so hotly pursued as 'spatial justice' in the 1970s? We may be accused of leaving out the frontiers completely and not doing anything about their industrialisation and tackling the future of the FELDA land schemes. But the resource frontier strategy now looks as if it is something of the past. In the first place, the 'Investment Incentive Act of 1968' (followed

---

10 The government may buy back the cash crop plots from the settlers and operate on the basis of joint-ventures or complete privatisation. But such move will not affect the ultimate exodus of most of the second generation youth.
by NEP) aimed at stimulating industrial decentralisation but this was untimely – hardly ten years after an early phase of import-substitution.

In 1970, there was no adequate evidence that industrialisation in Peninsular Malaysia had already reached a highly centralised level and that agglomeration diseconomies in existing major centres asked for dispersal to the remote frontiers in Pahang Tenggara and Kesedar. At that time, the developmental stage in the metropolitan centres of Malaysia was inadequate industrialisation and not too much. Unfortunately, besides abundant development literature in vogue in that period for advanced nations (because of industrial congestion in the core areas), there is no evidence to support such necessity in Malaysia. Consequently, it is worthwhile to refer to a self-critical statement of Richardson (1980:72):

'A regional policymaker or planner in a developing country relying on the products of regional economic research in the United States is likely to be more misled than helped.'

The industrial decentralisation policy as it has been implemented under the NEP is not appropriate for Malaysia. Industrial dispersal, in the foreseeable future, should be left to market forces with government regulatory measures. The key issue is to examine when polarisation reversal will likely occur in metropolitan centres of Peninsular Malaysia. This, however, remains a focus for future research.

In sum, the options for Malaysia are limited. Industrialisation, despite its problems, is a feasible alternative for substantial future growth. For some time yet, especially due to the highly competitive nature of the global manufacturing, it will have to be located where economic efficiency, rather than social equity, is the main consideration. The frontiers will be excluded and regions such as Pahang Tenggara and Kesedar will continue to produce agricultural products which will feed into the international trade and industry.

11 Frohloff-Kulke's (1988) research showed signs of polarisation reversal in Peninsular Malaysia between 1970 and 1980 based on selected socio-economic factors. Most of the selected factors leading to improved standards in less developed districts were, indeed, the results of government investment on infrastructure and facilities there. There is yet the need to investigate why industrial firms would not choose to invest outside established centres without incentives.
The Three Strategies Reconsidered

Initially, we examined two alternatives to refine Malaysia's resource frontier strategy. At the closed end of the spectrum was the agropolitan approach suggested by John Friedmann in 1975. To protect an autonomous region from surplus leakage, this approach recommends the policy of self-reliance and basic needs by disconnecting from exploitive external linkages – thus avoiding wealth disparity between individuals, resource depletion, pollution and energy crisis. Instead of relying on the growth centre concept to stimulate local growth, Friedmann proposes to set up a 'city in the field' where urban management is determined on the basis of self-government. Strongly built on the Chinese commune system, however, such 'territorial autonomy' would have to depend on food crops primarily for local consumption and would likely lower the standards of living of the participants. Further, it demands communal ownership of land and least interference from the central government. These conditions will not be acceptable to Malaysia's present government which has inherited a very open economy and a system of private ownership.

At the open-end of the economy, the integrated regional development strategy forwarded especially by Denis Rondinelli attracts the greatest attention. This strategy attributes the root cause of widespread rural poverty in the Third World to the lack of functional linkages between metropolitan centres and rural areas. According to Rondinelli, infrastructure and capital investment will help rural development by stimulating market demand and facilitating the access of farm produce to urban consumers. Hence, a three-tier hierarchical system is required. Nevertheless, the nature of Malaysia's resource frontier settlements is inappropriate to apply this strategy. As many case studies have indicated, Malaysia's relatively good infrastructure and the market-oriented cash cropping basically do not require small market towns. Intermediate or secondary towns may or may not handle the rural produce, depending upon the type of services required or the nature of agricultural production. Consequently, while some secondary towns either prosper or decline, the metropolitan centres continue to benefit
from the rural regions producing surpluses. Without an appropriate alternative to refine the resource frontier strategy, we move on to investigate industrial expansion outside the frontier regions as a means to provide jobs to the growing population in Pahang Tenggara and Kesedar.

Manufacturing industry has experienced rapid growth in the last three decades. Of the three types of industry, the export-oriented electronics industry has made the greatest progress. Proportionally, the private-owned small industry – constituting 80 per cent of all industrial firms – has declined, however, for lack of incentives and the drive to compete for oversea markets while the state-owned heavy industry has suffered substantial losses. Other public enterprises and local private capital have shown little interest in the manufacturing industry. Despite the recent boom in electronics investment from multinationals, the future is uncertain because their capital is highly mobile and site-selective, depending upon the comparative advantages of the host countries. Further, they use very few local materials and allow little transfer of technology. Consequently, Malaysia's future of industrial development needs to rely on its resource-based light industry. Once this basis is consolidated, local capital can be directed towards high technology.

In view of current global competition in the manufacturing industry, Malaysia has to dispense with its resource frontier strategy. In the foreseeable future, the frontier regions will have to be bypassed in the new wave of industrialisation – spatial equity has already become a casualty of the new pursuit of economic growth and efficiency.
CONCLUSION

Using the Malaysian regions of Pahang Tenggara and Kesedar as case studies, the thesis has examined the consequences of applying an urban-industrial growth pole theory derived from the West in the frontier regions of the developing world. Initially, the origins of resource frontier strategies are traced. Immediately after the Second World War, the fear of Communist expansion in the Western bloc led economists to formulate a series of theories to guide the growth of the underdeveloped world. The need to trigger development across geographical space produced the growth pole or growth centre theory. Before it could be transferred to the developing world, some adaptation was necessary. Having weak industrial bases but being rich in natural resources, many developing countries such as Brazil and Venezuela modified the theory to suit their own needs and constraints. Thus, agriculture or resource based resource frontier strategies emerged on the development frontier.

Malaysia has also been the target of these modified growth models. Having inherited an uneven spatial economy from its colonial past coinciding with imbalanced wealth distribution along ethnic lines, the resource frontier strategy has been used under the country's New Economic Policy as a tool to induce urbanisation of the Malays, and lessen social, regional and ethnic inequalities. Consequently, resource frontier regions, Pahang Tenggara and Kesedar, were targeted under this new rural urbanisation strategy. Our case studies of these two regions show that little urbanisation has been achieved. Oil palm and rubber were used as 'propulsive force' to boost the economic base of the frontier settlements but they served principally the interest of the world market and local metropolitan centres. Little surplus was retained within the producing regions. Though some settlements had more than 10,000 population, they remained basically rural in character. At the household level, most settlers improved their material standards of living after moving – income levels, food quality, housing, assets and land. There was some success in relieving the incidence of poverty. Yet, the progress was unstable.
because of strong fluctuations in commodity prices; and the living standards of the settlers remained at a relatively low level. Further, the land schemes were designed to improve the welfare of the first generation – the original settlers. Except for government services and other secondary and tertiary opportunities supplying basic services to local settlers, relatively few non-agricultural jobs have been created in the settlements. Consequently, a large proportion of the second generation youth will have to leave when they enter the labour market.

Indeed, much Malay urbanisation between 1970 and 1985 – one of the primary objectives of the New Economic Policy – occurred in the metropolitan cities, especially in the conurbation of Kuala Lumpur-Petaling Jaya. It is in metropolitan centres that jobs have to be created for rural youth expected to arrive in great numbers in the next twenty years. Industrial expansion will have to be focused as a main source of job provision. Currently, public action is needed to encourage capital investment to establish firms as a means to provide jobs and training facilities within existing urban centres. An untimely intervention to induce industrial dispersal to the frontier areas will only result in a waste of resources. A polarisation reversal – which will bring more balanced spatial development – has to be based initially on a more efficient industrial development.

Main Findings of the Thesis

This study of the resource frontier strategy in Malaysia has allowed us to draw useful lessons by considering the issue within a broad theoretical context of human resource development. Since the eighteenth century, key development theories have emerged and faded. But they have remained basically the monopoly of the Western core nations. Developing nations have endured not only in material poverty but also in a poverty of theory. They have been in a perpetual state of theoretical dependence, reliant upon ideas imported from core nations for adaptation to suit (often) the needs of dominating interest groups. With the international aid institutions acting as diffusing agents, development concepts, such as resource frontier strategies, cut across different continents. Having identical training backgrounds, both international consultants and
their host country counterparts have shared a common methodology and approach. Consequently, for example, an untimely industrial dispersal was planned and implemented in the resource frontier regions of Malaysia in the early 1970s.

Yet, the application of resource frontier strategy cannot be studied in isolation. It is an integral part of the global politics. The strategy is closely associated with the world market system which ultimately determines success and failure. Constrained by political options, planners help impose the top-down objectives (rural urbanisation on Malaysian frontiers) upon the recipients – the FELDA settlers. As implementors appointed by politicians, their primary task is to put government policies into practice. Their performance cannot be assessed, however, because development programs are decided by the central government and are out of their control.

Frontier settlers have been recruited from the peasantry to become cash crop farmers whose basic needs are met through a world exchange system. Their response to imposed objectives have been spontaneous, in accordance with daily needs and as expressed in their mobility, work duties and obligations towards family and children. Divergence in objectives between politicians and settlers has been substantial. Indeed, it mirrors effectively the success or failure of government policies.

Resource frontier development has had trickle-up effects on metropolitan and intermediate centres. The intensity of surplus leakage which these centres have been able to intercept is, however, uneven and selective, depending on the type of services they offer to the frontier regions. Subject to the control of the metropolitan centres, the newly emerging frontier settlement pattern cannot modify, at least for a period of time, the existing national urban system to any significant scale.

Resource frontiers have been a place of opportunity and challenge. Yet the frontier per se is a concept of transition. It ceases to exist once established. New frontiers need to be opened up if the concept is to survive. The limits have been reached in Peninsular Malaysia after thirty years of pushing back the tropical forests and replacing them with
plantation crops. Despite large revenues derived from cash cropping, the ecological consequences have been serious. Pressure is mounting from both national and international conservationist groups who are determined to put a halt to the frontier plunder in at least Peninsular Malaysia. Consequently, the time has come to end the resource frontier strategy and turn our attention to improving the lives and prospects of those who inhabit in existing urban and rural regions.
APPENDIX 0.1

Survey Questionnaire -- Comparing Settler's Past and Present Status in Pahang Tenggara and Kesedar

A. SETTLER'S PREVIOUS STATUS (BEFORE SHIFTING)

1. Place of Origin: ______________________ (state) ____________

2. Land Holding Size: ______ hectare(s),
   OR
   If none, land size owned by parents: ______ hectares;
   Main crop: ______,
   Other crops: ______________________;
   Livestock kept (in number): Chicken ( ), Duck ( ), Goat ( ), Cow ( ), Pig ( ).

3. Occupation and Income of Household Members:
   a. Household head's main occupation: ______,
      Estimated monthly income: $______
   b. Secondary occupation (if any): ______,
      Estimated monthly income: $______
   c. Wife's occupation: ______,
      Estimated monthly income: $______
   d. Any child's occupation: ______,
      Estimated monthly income: $______
      Total household monthly income: $______

4. Previous House Conditions:
   a. House type
      (i) wooden wall with atap roof ( ),
      (ii) wooden wall and roof with galvanised zinc/asbestos ( ),
      (iii) brick wall and roof with galvanised zinc/asbestos ( ),
      (iv) brick wall with tiled roof ( ),
   b. House age: _____ years
   c. Did you own it? Yes/No
   d. If you rented it, the monthly rental was $______
5. Facilities and Amenities
   a. Distance from home (km)
   
<table>
<thead>
<tr>
<th>Primary school</th>
<th>High school</th>
<th>Mosque/praying house</th>
<th>Health centre</th>
<th>Shops</th>
<th>Public transport</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>

   b. (i) Water supply by ___________________.
   (ii) House lighting by ___________________.

6. Household Possessions (in number)
   Radio ( ), Television ( ), Video ( ), Bicycle ( ), Motorcycle ( ), Car ( ),
   Sewing machine ( ), Refrigerator ( ), Washing machine ( ),
   Cooking\(^1\) by gas/ kerosene/firewood

B. SETTLER’S PRESENT STATUS (AFTER SHIFTING)

7. Date of Arrival: ____________

8. Household Head’s Educational Level:
   a. No formal education ( ),
   b. Primary school, standard _____,
   c. High school, form _____


<table>
<thead>
<tr>
<th>Member</th>
<th>Husband</th>
<th>Wife</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children’s situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

10. Reasons for Joining the Scheme:
   a. ______________________________________
   b. ______________________________________
   c. ______________________________________

\(^1\) Delete whichever is inappropriate
11. Have Any of Your Relatives Joined Other Resettlement Schemes? Yes/ No
   If yes, how many? ( ) and where? ________________________________

12. Present Living Conditions
   a. Land size: _____ hectares,
      What crop: ,
   b. Do you still own land elsewhere? Yes/No
      if yes, size: _____ hectares and; crop: 
   c. Livestock kept (in number): Chicken ( ), Duck ( ), Goat ( ), Cow ( ).

d. Income
   i. Household head's main occupation __________________
      Monthly income $_____
   ii. Secondary occupation ________________
      Monthly income $_____
   iii. Wife's occupation__________________________
      Monthly income $_____
   iv. Children's occupation_______________________
      Monthly income $_____
   v. Total income $_____

e. How long is your repayment period to the FELDA
   loan? _______ years,
   How many years left? _______ years.

   Your monthly repayment amount: $_____

13. Travel Distance, Working Time and Transport to Work

<table>
<thead>
<tr>
<th>Member</th>
<th>Husband</th>
<th>Wife</th>
<th>Child 1</th>
<th>Child 2</th>
<th>Child 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance (km)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport by</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14. Household Possessions (in number)
   Radio ( ), Television ( ), Video ( ), Bicycle ( ), Motorcycle ( ), Car ( ),
   Sewing machine ( ), Refrigerator ( ), Washing machine ( ),
   Cooking\(^2\) by gas/kerosene/firewood ( )

15. Household Expenditure Pattern (Malaysian Ringgit per Month)

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount ($)</th>
<th>Item</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td></td>
<td>Private transport</td>
<td></td>
</tr>
<tr>
<td>Other food</td>
<td></td>
<td>(maintenance(^b) &amp; fuel)</td>
<td></td>
</tr>
<tr>
<td>Cigarettes (or tobacco)</td>
<td></td>
<td>Public transport(^b)</td>
<td></td>
</tr>
<tr>
<td>House maintenance &amp; repair(^a)</td>
<td></td>
<td>Lighting (fuel/electricity)</td>
<td></td>
</tr>
<tr>
<td>Clothing &amp; footwear(^b)</td>
<td></td>
<td>Water supply</td>
<td></td>
</tr>
<tr>
<td>Education for children(^b)</td>
<td></td>
<td>Entertainment</td>
<td></td>
</tr>
<tr>
<td>Medical care(^b)</td>
<td></td>
<td>Ceremonies</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>Remittance(^b)</td>
<td></td>
</tr>
</tbody>
</table>

Note:  
\(^a\) Expenses incurred since moving in.
\(^b\) On a yearly basis and the monthly expenses are obtained after dividing by twelve.

16. Frequency, Means and Purpose of Visiting Nearby Towns

<table>
<thead>
<tr>
<th>Town Name</th>
<th>Frequency(^a)</th>
<th>Means of Transport</th>
<th>Purpose of Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Series of Selected Towns</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^2\) Delete whichever is inappropriate
17. Compare to the Place of Origin, State Whether the Present Area is --
   Much Better (1), Slightly Better (2), About the Same (3),
   Slightly Worse (4), Much Worse (5) in terms of:

   a. Income 1/2/3/4/5
    Comment__________________________

   b. Housing 1/2/3/4/5
    Comment__________________________

   c. Educational facilities 1/2/3/4/5
    Comment__________________________

   d. Religious and communal facilities 1/2/3/4/5
    Comment__________________________

   e. Public transport 1/2/3/4/5
    Comment__________________________

   f. Living environment 1/2/3/4/5
    Comment__________________________

   g. Food supply and quality 1/2/3/4/5
    Comment__________________________

   h. Marketing of home-grown food produce (if any) 1/2/3/4/5
    Comment__________________________

18. Settler's Other Remarks

______________________________
### Appendix 3.1A: Agencies to Modernise the Malay Economy (Mainly Urban Areas)

<table>
<thead>
<tr>
<th>Promoting Agency</th>
<th>Year Created</th>
<th>Main Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERNAS (National Corporation)</td>
<td>1970</td>
<td>- Accelerates Malays(^a) involvement in modern sector activities and trains high-level professional staff to manage firms in manufacturing, foreign trade, mining and construction; and - Invests in joint-venture projects with large foreign firms.</td>
</tr>
<tr>
<td>UDA (Urban Development Authority)</td>
<td>1971</td>
<td>- Identifies strategic sites in Kuala Lumpur, state capitals and other major towns to transform them into multi-ethnic commercial areas; and - Purchases or leases private commercial premises to facilitate Malay's investment in business.</td>
</tr>
<tr>
<td>MIDA (Malaysian Industrial Development Authority)</td>
<td>1970</td>
<td>- Promotes industrial activities (feasibility studies, research and industrial technology), and assesses whether they fulfil the requirement of the dispersal policy.</td>
</tr>
<tr>
<td>SEDC (State Economic Development Corporation)</td>
<td>1971</td>
<td>- Takes part in activities such as construction of houses, manufacturing and commercial enterprises, and industrial estates as well as land development projects; and - Develop land schemes of commercial crops.</td>
</tr>
<tr>
<td>BIF (Bumiputra Investment Foundation)</td>
<td>1978</td>
<td>- Acquires reserved shares of enterprises with high growth potential. These shares will be held in trust and subsequently sold to the Malays.</td>
</tr>
</tbody>
</table>

Note: \(^a\) includes other indigenous people.
### Appendix 3.1B: Agencies to Modernise the Malay Economy (for Rural Areas)

<table>
<thead>
<tr>
<th>Promoting Agency</th>
<th>Year Created</th>
<th>Main Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Pertanian (Bank of Agriculture)</td>
<td>1970</td>
<td>Coordinates the federal government's credit programs for agriculture, with initial focus centred on Murid and Kemubu rice scheme areas; and provides services to tobacco planting and marketing, livestock raising, agricultural machinery, agro-based industries, forestry, purchase and development of agricultural land.</td>
</tr>
<tr>
<td>LKIM (Fisheries Development Authority of Malaysia)</td>
<td>1971</td>
<td>Promotes commercial fisheries and aquaculture projects, provides subsidies to small fishermen for equipment and materials; and assists 'Fishermen Associations' or cooperatives with working capital to undertake trading enterprises.</td>
</tr>
<tr>
<td>MARDEC (Malaysian Rubber Development Corporation)</td>
<td>1971</td>
<td>Sets up factories to process rubber produce of smallholders in collaboration with RISDA which has 2,000 collecting centres for purchasing rubber from smallholders.</td>
</tr>
<tr>
<td>RISDA (Rubber Industry Smallholders Development Authority)</td>
<td>1973</td>
<td>Offers replanting grants to smallholders; and undertakes training and extension programs for rubber smallholders.</td>
</tr>
<tr>
<td>LPN (National Padi and Rice Authority)</td>
<td>1973</td>
<td>Coordinates the planting, processing and marketing of padi (unhasked rice grain) and rice; and provides milling, drying and warehousing facilities and ensures sufficient supply of rice in stable price from producers to consumers.</td>
</tr>
<tr>
<td>FOA (Farmers' Organisation Authority)</td>
<td>1973</td>
<td>Provides credit and other facilities to members for agricultural inputs, processing, marketing and extensive services; and coordinates activities of rural institutions particularly between cooperatives and the Farmers' Associations.</td>
</tr>
</tbody>
</table>
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ADDENDUM

Growth pole theory was developed during the early 1950s from François Perroux's conceptualisation of the nature and pattern of economic growth. According to this theory, big industrial firms induced linkages by acting as a 'propulsive force'. Consequently, multiplier effects were generated and the aggregate economy bolstered. Perroux's idea was later extended to imply that growth could proliferate across geographical space, exemplified by the direct relationship of an urban centre with its hinterland. This relationship forms the core of resource frontier strategies.

Eager to boost national growth, South American country leaders were encouraged by the potential of growth pole theory. During the early 1960s, the theory was modified and applied adaptively in the remote frontiers in Venezuela and later, in a different form, in Brazil. As the idea propagated, Malaysia incorporated it in her frontier development program developed by the Federal Land Development Authority (FELDA) during the early 1970s. Frontier development, however, involves shifting of people from one place to another. Hence, the settlers become the chief target in evaluating the success or failure of regional land schemes. As the change in income between a settler's place of origin and the resettled area is an important yardstick in assessing the FELDA experience in Malaysia, it is the focus of the thesis.

Hence, two sets of questions arise in discussing the application of a modified theory whose focus shifted from urban-industrial growth poles to include rural growth centres of the Third World, and the income change of settlers. First: why was it necessary to detail the South American experience since the focus of the thesis is on Malaysia; and why were Malaysia's neighbours neglected in this analysis? Secondly, in examining the Malaysian frontier experience: how can the survey methods be justified

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1 Most material of this addendum has also been incorporated in the revised version of the thesis.
when two schemes were selected for a comparative study and, why was net income (instead of gross income) used for assessing progress?

In tackling these two sets of issues, we have to examine how growth pole theory was applied in different ways in South America and explain why it is imperative to do so prior to the study of the Malaysian case. Contrasted case studies are taken from Venezuela and Brazil to set the precedent and to imply that social theories are modifiable when applied in human societies (Section 1). Subsequently, we explain why it was more logical to select two FELDA schemes at two different levels of development and why net income was used (Section 2).

1. THE GROWTH POLE REVISITED

A distinction must first be made between 'growth pole' and 'growth centre' because in actual practice they have different connotations. Basically, the 'growth pole' refers to existing or newly created urban centres whereas economic growth hinges upon industry as the main propulsive force. Conversely, the use of the term 'growth centre' has been more flexible. Since the 1960s, it has been used to denote both a major city of national importance (with services as the most prominent source of employment) and rural centres. In the latter case, and most typically in the Third World, a rural growth centre relies on agriculture or small industry as its principal local employment source. Despite this general distinction, there are a small number of authors who have used these two terms interchangeably.

The initial application of growth pole theory in the developing world was a result of direct interventions of the 'MIT-Harvard Joint Centre for Urban Studies' in the early 1960s. Venezuela's Guayana region became the first development package undertaken by John Friedmann and his North American colleagues. Their conviction then was that city was a 'civilising agent' which would diffuse modernisation elements to any 'under-utilised' and 'backward' sub-national regions. Besides Venezuela, Friedmann was also employed as a senior consultant in Brazil and Chile. Although he was not directly
involved in the Amazonian frontier program, his presence and the fashionable
development ideas had clearly influenced Brazilian decision-makers to use the
pole theory in their attempt to narrow the gap between the more developed Centre-South
coastal core region and the depressed Northeast. Later, in the late 1960s and the early
1970s, this development concept was reduced to a rural agricultural strategy for the vast
Amazon Basin. In a program called 'Polamazonia', SUDAM (Superintendency for the
Development of the Amazon) had conceived the idea of 'rural growth poles' in setting up
agro-cattle and agro-mineral centres. The Brazilian model has downgraded the original
criteria needed for an urban pole to a simple rural growth centre based on agriculture.
This adaptation, however, had relieved the Brazilian government of financial inputs
considerably. In comparing the different resource frontier strategies of Venezuela and
Brazil, it paved the way for studying Malaysia's own strategy where we show how a
development theory was conceptualised and, during implementation, was adapted to local
social, economic, political and physical conditions.

There was a direct link between the Friedmann package in South America and
Malaysia -- both areas being strongly exposed to international development concepts at
the governmental level. In Malaysia, it was her main national planning agency -- the
Economic Planning Unit -- which, through its expatriate advisers and local senior staff,
placed the growth centre concept on the development agenda in 1970 when the New
Economic Policy was launched. Consequently, Malaysia's FELDA schemes have been
incorporated into the 'rural urbanisation program' to inject an urban environment in rural
settlements. Although cash cropping agriculture was used as the 'propulsive force',
industry and off-farm jobs have been highlighted as important components of the
resource frontier strategy. Consequently, the term 'major growth centre' was used to
designate the regional centre of Muadzam Shah within a planned frontier region when the

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Pahang Tenggara Master Plan\(^3\) was prepared in 1972. Likewise, in planning for the South Kelantan region, the 'Indicative Regional Plan' selected a rural settlement -- Jeli -- to act as a 'development pole' to lead the growth of its adjacent southern areas\(^4\).

Growth centre terminology had a more direct impact on Malaysia than neighbouring Indonesia, Thailand and the Philippines. Indeed, the use of the term 'development pole', 'growth pole' or 'growth centre' in the official documents of those countries was either vague or had little meaning in describing the implementation of their frontier development projects. Due to budgetary constraints, their investment for infrastructure and facilities per household was much smaller than Malaysia. Consequently, the conceptual and practical link between South America and Malaysia was more coherent and vigorous than Indonesia, Thailand and the Philippines. Hence, there is no need to elaborate their experience in this thesis. Thus, based on the contacts of Friedmann's development package, it is appropriate to use Venezuelan and Brazilian material as an essential introduction to the core of the thesis focused on Peninsular Malaysia.

There is, however, a weakness in the discussion of settlers' life in the Amazonian and Guayana frontier development programs. Short on local language sources and data, it also lacks a comparative perspective indicating how settlers' life patterns evolved before and after they moved in the process of being incorporated in their respective country's frontier regional planning program. This perspective is fulfilled later when we undertake to study FELDA settlers in Malaysia.

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2. JUSTIFYING THE SURVEY METHODS

Bandar Tun Razak and Ciku are two FELDA settlements located respectively in the Pahang Tenggara and South Kelantan regions. They were deliberately selected from two lagging east coast states of Peninsular Malaysia to examine the long-term economic and social sustainability of FELDA program and the consequences of Malaysia’s resource frontier strategy initiated since 1970 -- the prime objective of the thesis. Under the New Economic Policy, the strategy aims at narrowing the disparity between the west and the east coasts by concentrating on infrastructure and productive investment in townships and rural centres within newly-cleared zones.

Two Schemes

A comparative study of two schemes is important because it shows how two areas planted with the same crop (oil palm) under identical type of management, but at different stages of development, can lead to diverse results. Thus, by explaining that settlers’ income corresponds with yield levels of oil palm trees (according to age) and available secondary jobs opportunities in each area, a more comprehensive picture of changes in their income can be supplied. This eliminates biases arising from studying a single scheme. On this basis, Bandar Tun Razak, an older scheme in Pahang Tenggara, and Ciku, a younger scheme in the South Kelantan region, were chosen.

Two Samples

Bandar Tun Razak and Ciku differed substantially in population size -- the former had an estimated 3,200 households whereas Ciku (consisting of Ciku 1 and 2) had only 720 households. As FELDA settlers were virtually all oil palm workers after resettlement, a 3 per cent sample size was deemed adequate for surveying a highly homogeneous population. Nonetheless, to make computation easier for a comparative study, an identical number of households was taken for both schemes. Consequently, one hundred households were surveyed in each settlement, with Ciku having a higher density of sample than Bandar Tun Razak. In selecting the households, a varied socio-economic
background of settlers was ensured so that a wider scope of features would appear in the comparative study.

Net or Gross Income

Net income was used because the assessment of change in settlers' living standards was not based on income alone but also on the change in their expenditure patterns, asset holdings and occupational structures. Using this method, the life patterns of settlers could be more accurately reflected by the actual amount of disposable cash. Further, the use of gross income would have been incompatible for a comparative study as 55 per cent of Ciku settlers were still not incorporated into the block system whereas all Bandar Tun Razak settlers were block members. Under FELDA arrangements, the large income gap between block and non-block members is transitory and will disappear when oil palm trees reach maturity in a relatively short period of time. Thus, it is best not to use the gross income for our comparison purposes. The difference between gross and net incomes, however, is reflected in the capital gains of settlers; it is acknowledged in both Chapters 5 and 6. These capital gains are a 4-hectare oil palm plot and a houseslot which the settlers will eventually own after repaying loan instalments to FELDA for 15 years.

5 These non-block members received an income much lower than block members (less than half in the case of Ciku). Their remuneration was based on the number of workdays and the output of palm fruits. They were not required to start loan repayment as yet.