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ARTICULATING KIN GROUPS AND MINES: THE CASE OF
THE GOLD RIDGE MINING PROJECT IN THE SOLOMON
ISLANDS.

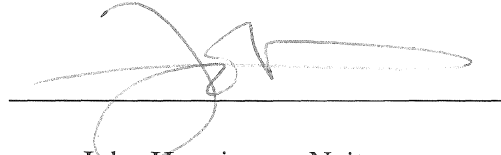
JOHN HOUAINAMO RAUTORASU NAITORO

A Thesis submitted for the degree of Doctor of Philosophy
of THE AUSTRALIAN NATIONAL UNIVERSITY

National Centre for Development Studies
Asia Pacific School of Economics and Management
December 2002

Declaration

Except where otherwise cited, this thesis is the result of my own research work.

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke, positioned above a solid horizontal line.

John Houainamo Naitoro

DECEMBER 2002

Dedication

This work is dedicated to the following: Irene Kentana Ke'eamane (1943-1987) who is my mother and first educator; John Iuhanaikahu Hunuratana my Are' Are shaman educator (also a father); and importantly to my wife, Shamaness Irene Rautahana Vaune Stewart without whom the thesis would not have been possible, and to our boys, Aika, Ben, William and Brandon.

Biography

It is not necessary for a thesis to have a biography of the researcher. I chose to include it here because it locates my worldview. My intention here is to help the reader know that as a researcher I also have certain dispositions rooted in personal experience, and these influence the way I interpret the world. This is a story of what I perceive about development and social changes in Solomon Islands society.

However, individually we are each a product of our history, and therefore despite how objective a piece of research may be intended, there is always the possibility that our upbringing always influences our position towards a subject of interest. The intention here is to place my self in a particular context for the benefit of the reader. There are two types of histories which are important to me. One history is external history where, like many Solomon Islanders, we see ourselves in the light of history of a contact with European expansion. The other history is that of oral history. The latter history is a vital component of my experience of the world. The importance of oral history comes through my position in the thesis. That is, the significance placed on kin groups in this thesis.

I am a highlander from a tribe known as the 'Are'Are in the Southern region of the island of Malaita in the Solomon Islands. As a member of a particular social group, my identity is defined by birth and by tradition in this part of the worldview. The 'Are'Are is the second largest linguistic group on the Island of Malaita. On the Island, there are nine other similar linguistic groups. These linguistic groupings are important for an individual for a number of reasons: for individuals, once socialised in the structures of the social groupings they serve as a basis for individuals to form associations. Apart from individuals forming associations, there is also the role of the social group as a basis to create familiarity for individuals in the group. Thus, as an individual, I learned the ways of kin groups from within the 'Are 'Are society. This society is learned through social exchange and participation in an exchange system as one gradually socialised into this participation process. The participation is legitimised on the basis of kinship in terms of family membership in the extended family; but also on the basis of a higher cause-that of respect and honour of kinship and ancestors. Thus

the 'Are' Are worldview, as a world based on human relationships and a higher cause of honour and respect for the dead, forms the basis from which I judge the new forms of socialisation based on modern schooling.

In search for 'a'rete' good life' in Are' Are, my parents left the highlands for the coastal area. After several years at Hauhui, West Are' Are, my family found that, obtaining labour employment to gain some cash was not possible. At the coast, our coastal relatives were not different from those in the highland, except they were more persuaded in the Christian doctrines of 'sin and punishment,' rather than anything to do with 'good life' as such. I in retrospect, realised that good life at the coast meant 'avoiding sin and punishment'. This was clearly different from the 'good life' among the highlanders, which was about finding ways to gain wealth in pig raising to participate and assist relatives in exchange, and to organise feasts to honour and respect the dead.

In 1967, my family migrated to Western Province on the Island of Vella la Vella. There, on a plantation station known, as Vaso, owned by a Chinese merchant (Chan Apong), the family resided for four years. My family lived and worked on the plantation, especially my father who became the 'boss man' for Malaitans working in the plantation. Most labourers were from Kwaio and 'Are' Are on Malaita. The amount of money earned was not even enough to help any relatives and to instigate any exchange feast. About \$A30 a month, for a family of five, was not enough to achieve the 'good life'.

The family returned to Malaita by late 1970 after failing to obtain any 'good life' from plantation work. I was 12 years old by then, but was keen to begin school the next day. At the Tawaimare local school the teacher, who was one of the only female teachers in the whole tribe, asked if I had been to school before. I had no idea what 'schooling' was about. However, as was common in many primary schools sitting arrangements at the time, I was allowed to share a desk in which two other cousins were sitting. One of the cousins suggested that I should simply suggest a number to the teacher when she asked if I had been to school before. Thus the number '2' was a good number as this meant that I could remain sitting with the cousins who were then in standard 2. This did not work out because I knew nothing about 'abc' or

'handwriting'. Thus, I was moved to another class. This time it was in standard '0'. From the 1970s, I started the process of formal schooling. After attending primary school at Tawaimare from 1970 to 1974, I went to two other schools for standard five and six. By this time, the home village school was developing to standard seven levels, to which I returned in 1976.

I did high schooling from 1977 to 1981 at Su'u National Secondary School, Malaita Island. As a Christian Mission School, Biblical studies became an important component of study. This involved the study of all the books of the Bible, hymns, and prayers. Schools such as these, while important agents for developing awareness about science and society, became a 'switch breaker' for students who may still have considered their social and cultural worldview as relevant. Since a 'good student' in this environment also meant a 'good Christian', the pressure to ignore culture and indigenous ways of this 'switch breaker' enhanced thinking. Other students formulated a new identity between 'custom' as symbolising 'heathen and uncivilised' and to 'Christianity as civilised' and the 'right way of thinking' about oneself and the world in which one lives. Clearly, to think 'custom' is quite difficult if one is faced with Christian rhetoric that borrows a western valuation of society and socialises through the schooling system.

In 1982, I was among only sixty students in the country chosen to carry on to senior high school, at the form six levels for the year. This meant that only fewer than 10% of all the Form five students in the country were to be provided the opportunity for further study. After a year in King George, the Sixth National Secondary School, and a Foundation science year at the University of the South Pacific, I went for undergraduate study at Otago University, in Dunedin in New Zealand. After completion of an undergraduate degree in 1986, I returned to the Solomon Islands. I joined the Public service as an assistant director of the National Archives of the Solomon Islands. The government thought this would be the most relevant area for me. I worked as Assistant Archivist for a year, and then in the following three years as Archivist. The archival policy was complete in 1989 after bureaucratic struggle because the Archives, as an institution, attracted limited government attention. I returned to Otago University after winning the Sir Paul Reeves Scholarship in 1990 and obtained a Masters Degree in Social Anthropology by the end of 1992.

After returning to the Solomon Islands, I sought employment with the Solomon Islands College of Higher Education (SICHE) as Head of School of General Studies. After six months in the job, I shifted again to the public service. This was following my appointment as the permanent secretary to establish a new Ministry of Tourism. I was elected as the Chairman of the Tourism Council of the South Pacific (TCSP) during the period of 1993 to early 1994. However, politics in the Solomons was volatile, and early 1994 was posted as permanent secretary to the Ministry of Forestry and Conservation. The government changed that year from the NCP (National Change for Progress) government of Billy Hilly to the GNU (Government of National Unity) led by the late Solomon Mamaloni. In 1994, Solomon Mamaloni as GNU leader took over the government. This was when I was again deployed as Government Consultant for National Heritage (GCNH) from 1994 to 1995. I was given the responsibility for the development of the National Gallery and Cultural Centre (NA&CC). This project became personally burdening in that there was no financial resources to do anything about it. My family and I worked voluntarily for while in trying to get the need of the project for financial assistance. My family, especially my wife and the children and relatives, volunteered to clean up the old Government House. The building had until then been left to deteriorate. These efforts made this project possible.

Ross Mining NL and the state asked me to do a base line study in June 1995. The study was to identify social groupings and recommend how best the Gold Ridge Mining project should deal with customary landowners. The study emphasised the need to ensure that the customary landowners, known as the Gold Ridge Land Owners (GRLO), were 'organised' enough to ensure that their concerns were satisfactorily represented to the Government and the mining company. This study led to the formulation of the Gold Ridge Landowners Council and its constitution after consultation with private lawyers. Thus, the GRLO was seen as a legitimate representative of the landowners relevant to the Gold Ridge Mining project, as far as the State and Ross Mining NL were concerned. The above situation was the basis for negotiating deals between state, customary landowners and the mining company.

The Prime Minister's Office appointed me to work as the permanent secretary to the Ministry of Mines and Energy in February 1996. The emphasis was on the implementation of the Gold Ridge Mining Project. Through the process of

establishing a government negotiating team, the Ministry of Mines and Energy as an agent of state pursued the implementation of the project. The Ministry then made regular contact with the landowners and the mining company. This was done through issues of concern to all parties brought before the negotiation table. These involved fiscal policies, involving taxation, benefit distribution, risk sharing, and compensation for displacement of customary landowners. This process took the period from early 1996 to October 1997 when the parties signed all agreements. The issue of the Mining License from the government was eventually resolved on 12 March 1998.

The relevance of all the above is twofold: first, that I had a strong traditional grounding before taking up formal schooling. This means that in some ways I attempt to reconstruct a worldview that has elements of tradition and elements of modernity. Secondly, just because indigenous Solomon Islanders now run the government, this does not mean it is run according to the desires of kin groups. Thus, while national development is desirable, kin identity remains an important feature of kin psyche. The thesis is informed from various perspectives: initially from the perspective as a kin group member, and as a student with some anthropological background. This includes kinship experiences as a tribesman, government official and social researcher trying to understand the forces that continue to influence kin groups in Solomon Islands.

Acknowledgments

This thesis study would not have been possible had it not been for the help of others. First, I wish to thank and acknowledge the support of my wife, Irene Rautahana Vaune Stewart for all her support, in all the senses of the word. Also thank you to the three boys Aika Bridge, Hunuratana Benjamin, Kokoohaoru William-John who reminded me every now and then of one of the more important things of life: fatherhood. Thank you also to our older kids Brandon and Melanie, and their families, for giving moral support.

I would like, formally to thank important institutions and individuals that made my study possible. I thank the Solomon Islands Government for having confidence in me in providing the opportunity for this study. Also, thanks to the Australian government, through AUSAID, for providing the scholarship necessary to carry out the study at the National Centre for Development Studies at the Australian National University. There are individuals whose assistance made the study more meaningful and I thank the members of my supervisory Committee who assisted me in the research. The advice and support of Dr Peter Larmour (Chairman), Dr Chris Ballard and Dr Glenn Banks, were most helpful in improving the thesis. Where there are errors, these are my own. Dr Peter Larmour's interest in Development Administration issues in Melanesia, and the interest in mineral resource development in Melanesia by both Dr Chris Ballard and Dr Glenn Banks, gave significant guidance for the completion of this study.

Special thank you also goes to Professor Raymond Apthorpe for commenting on my early writings. His anthropological insights were helpful guides. I acknowledge the support of the National Centre for Development Studies, especially Maurrete Macleod for her assistance in language correction, and Mr. Tony Varty, the Centre's Computer Technician for his support in making sure my computer skills improved. I thank my colleague, Michael Jackson, for sharing his computer skills when I could not get to Tony quickly.

Back in the Solomon Islands, I acknowledge the staff of the National Archives of Solomon Islands, Ministry of Lands and Survey, and Ministry of Mines and Mineral Resources, which provided relevant resource materials during 1999 and 2000.

I thank and acknowledge the help of Guadalcanal elders who provided me with understanding about their view of Gold Ridge project. In particular, the Guadalcanal Chief, late Sulugaga and his people, were important in providing detailed information about kinship systems and his community in Gold Ridge Village (Valebebea).

There are others that helped me through out the period of the research which I have not mentioned by name. Thank you to all of you.

Abstract

In the world of increasing globalisation and nation state development, many traditional cultures are increasingly under pressure. This is to not only change their ways of life, but also even to surrender the natural environment in which they have lived for many generations. Natural resources development is one of the most important forces exerting major changes on traditional culture in Melanesia. The dilemma is in finding the balance, if there is any such thing between natural resources development for nation building and the survival of cultural groups that have always depended on those environmental areas accessed for commercial development.

This thesis is about social groups and their relationship with natural resource development projects. It hopes to contribute to the understanding of the nature of that relationship. Further on, the idea is to improve understanding of how natural resource development relations are practised. The focus is on the sector of mineral resources development, in both Papua New Guinea and the Solomon Islands. The investigation focuses on forms and practices of articulations in the context of mining project relations. The underlying assumption is that the nature of relationship in any scheme of things matters for the actors involved.

The methodology used is that of case studies. The Gold Ridge Mining project in the Solomon Islands constitutes the major case research for this work. The selection of the Gold Ridge Mining project is important because of its relevance for understanding social group relations in mineral resources development. Apart from Gold Ridge case, four other major mining project cases in Papua New Guinea are also reviewed. These projects are the Panguna, Ok Tedi, Porgera, and Lihir Mining projects. Each case is examined in order to identify the forms and practices of articulation of social groups in mineral resources development. Apart from mining cases in PNG and the Gold Ridge Mining project in Solomon Islands, the research also reviews other natural resources development projects to locate the historical context of articulation of social groups.

Historically, the articulation of social groups began after contact in both Solomon Islands and Papua New Guinea. The articulation of social groups first occurs through material exchanges with social group members, and subsequently through the

introduction of state institutions. The introduced central state made unto itself the role of 'central ruler,' and in the process automatically made social groups 'the ruled'. This study finds that this instrumental form of articulation rooted in historical contact has also sustained in the postcolonial state in Solomon Islands and Papua New Guinea.

The mining cases reviewed in Papua New Guinea show that despite gradual improvement in the nature of relations with social groups in each subsequent mining project, such improvement was characteristically of process forms. In other words, there have been improvements in attitude, actions and forms of interactions in relations to project development. However at the same time, the structures that govern these processes remain, and social groups could never be equals in their position of influence towards mining development projects. The Gold Ridge Mining project case also showed improvement in the processes of good public relations, reflected in government land offers and higher award of royalties and relatively reasonable compensation packages. However, at the same time, social groups find these processes to be a means of distracting the resource owners from the more important things about resource use. That is, the need for the state to surrender mineral rights to landowners so that they can take their rightful role as resource owners. Given the fact that the existing laws remain in favour of state ownership of mineral resources, at least for the mean time, the situation persists.

In Solomon Islands and Papua New Guinea, natural resources development has its origin in the periods of colonisation, and therefore the rules, roles and values associated with the imposed state have carried forward into the post-colonial period. In other words, the problem of relations between kin groups and state is structural. The state persisted over time in maintaining control over the use of natural resources for national development. This served the interests of the state but marginalise kin groups. Therefore, despite a gradual improvement in the processes applied in accessing natural resources in PNG and Solomon Islands, the structural displacement of kin groups remains to undermine the use of such resources to meet kin groups' local goals.

List of Acronyms

CBSI	Central Bank of Solomon Islands
CDC	Commonwealth Development corporation
DBSI	Development Bank of Solomon Islands
GDA	Guadalcanal Development Authority
GNU	Government of National Unity
GP	Guadalcanal Province
GRAC	Gold Ridge Advisory Committee
GRLA	Gold Ridge Landowners Association
GRLOC	Gold Ridge Landowners Council
GRLO	Gold Ridge Landowners
GRNC	Gold Ridge Negotiation Committee
ICSI	Investment Corporation of Solomon Islands
NAG&CC	National Art Gallery and Cultural Centre
NBSI	National Bank of Solomon Islands
NCP	National Change for Progress
NFDL	National Fisheries Development Limited
NSO	National Statistics Office
PSC	Public Service Commission
RMSIL	Ross Mining Solomon Islands Limited
SEIC	Social and Environmental Impact Committee
SICA	Solomon Islands Christian Association
SIDT	Solomon Islands Development Trust
SIEA	Solomon Islands Electricity Authority
SIG	Solomon Islands Government
SICHE	Solomon Islands College of Higher Education
SIPL	Solomon Islands Plantation Limited
SML	Special Mining Lease
SSEC	South Sea Evangelical Church
STL	Solomon Taiyo Limited
TCSP	Tourism Council of the South Pacific
VDS	Village Development Scheme

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Chapter 1

Introduction

This thesis is about the Gold Ridge Mining Project. The Gold Ridge Mining Project (GRMP) raised widespread hope among the people of Solomon Islands. Solomon Islanders are mostly rural dwellers, and live mostly in villages located on customary land. Most Solomon Islanders have always thought of themselves as autonomous, both politically and economically. This changed since contact with the outside world, initially in the nineteenth century and more profoundly in the twentieth century. Ever since, Solomon Islanders have struggled to regain this sense of autonomy. Thus, when Solomon Islands gained political independence in 1978, it gave a sense of hope (in a political sense) to kin groups. It raised the expectations of achieving the right to self-determination.

However, after twenty years of independence, people have become disappointed with the government. The central government has been unable to deliver on the promises of economic growth and development. Government leaders are also accused of corruption. Lack of follow-up to bring corrupt leaders to justice meant there is a general perception that politicians are corrupt. The twenty years of political rule by indigenous rulers have seen the disappearance of the country's natural resources, particularly in the forestry and fishery resources sectors. While all the resources are disappearing the majority of the Solomon Islands population remain in villages and only 20% live in the main townships. Many people lost hope in the state's ability to improve the lives of ordinary Solomon Islanders after their high expectations from political independence in 1978.

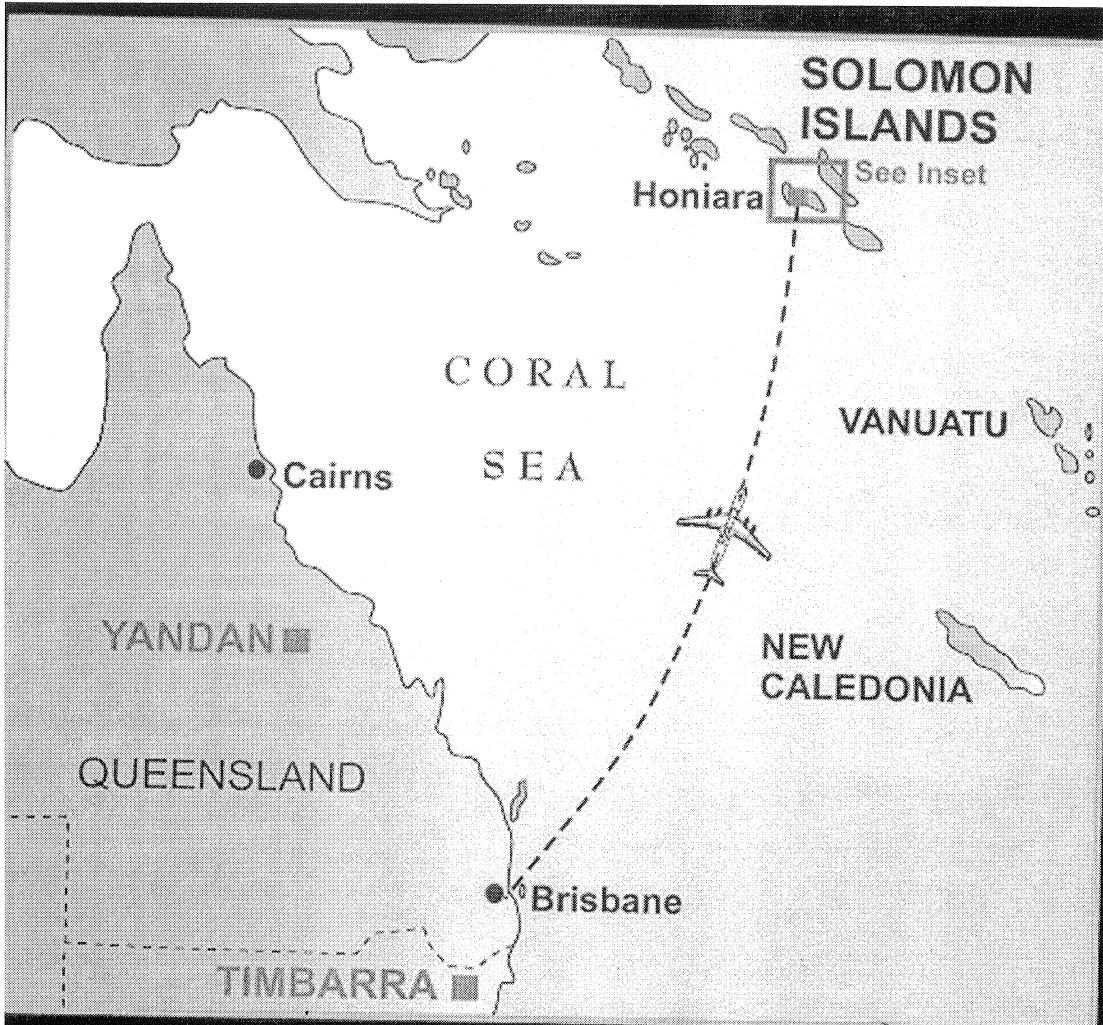


Figure 1: Map showing the location of Solomon Islands in relation to other Oceanic states (Source: Ross Mining NL).

The development of the Gold Ridge project was a government objective for many years. However, it never quite made it to the final stage of mining development. This changed when the government suddenly granted the first hard rock mining license on March 12, 1997. There was renewed hope not only among government leaders but also among ordinary Solomon Islanders, especially landowners. Most Solomon Islanders consider themselves landowners. Individuals are members of social groups by kinship. Landownership is associated with kinship groupings and therefore individuals are landowners by being members of the group. Generally then, Solomon Islanders consider natural resources within the territory of a social group as belonging to them, and not any one else, including the state. Natural resources are usually seen

as the means to improve their position, not only within their society but also in relation to others, including the state and natural resource developers.

The Gold Ridge Mining project was a 'dream come true' for the kin groups of the Matoba society in central Guadalcanal. Other social groups in Solomon Islands were also expecting that the Matoba kin groups would be able to meet their basic needs from this mining project. It was a general expectation that the Matoba kin groups should show all Solomon Islanders that development at the village level is possible through natural resource development - especially gold. The sense of economic hope was short-lived, because on the day the special mining lease for Ross Mining NL was to be signed, the Matoba landowners lodged a formal complaint against the project. The Melbourne Law Firm, Slator & Gordon acted on behalf of the landowners who were led by Willy Rone, one of the five principal landowners of Matoba society.

The litigation was important because it reminded many Solomon Islanders of an inherent fear they had of foreign companies and of the state itself. This common perception is rooted in the fact that, despite the efforts of indigenous community members, most Solomon Islanders have not benefited from the exploitation of their natural resources. Natural resource exploitation, as seen in Solomon Islands, includes commercial agriculture, forestry development, fishing and, most recently, mining development. Before political independence in 1978, indigenous Solomon Islanders tended to lay the blame for this phenomenon on the colonial administration that had ruled the nation up until then. However, after twenty-four years of political independence, where leadership of the country had been in the hands of local people, this situation had remained the same, or even deteriorated. Thus, if constructive use of the nation's natural resources is to be achieved, then there have to be questions as to why kin groups consistently believed that there is an inherent bias against them in natural resource use. The landowners' litigation against Gold Ridge raised an important question. Why do landowners feel marginalised in the Gold Ridge project after almost two years of negotiation with them? What is the nature of this marginalisation? This thesis explores the nature of relationship between kin groups and the Gold Ridge Mine.

This feeling of landowner marginalisation is not new in Solomon Islands. The history of contact with the colonisers, and the subsequent establishment of colonies in and among kin groups, was violent and oppressive at times. This caused suspicion of state-promoted activities. Political independence in 1978 was perceived as an end to the colonial state. Just before political independence, development planners adopted a policy of establishing joint-venture projects, which attempted to address the problem of revenue generation for the protectorate. Nevertheless, for the Islanders this was seen as a way of reducing foreign control of natural resources. It implied the prioritisation of foreign/ local relations over development activities. The expectation of the postcolonial state was to represent the local community's interests when it entered a joint venture project with a foreign company. The rationale at the time was that if the interests of the owners of the natural resources could be effectively reconciled with those of the foreign investors, conflict would be avoided. The landowners would benefit, as would the foreign investors who had the technology and capital to convert the natural resources into a marketable product. The state's role as a mediator between investors and landowners was seen as relevant and useful. Solomon Islands has had this policy of 'joint-venture' relations over the last 24 years.

However, the results of these commercial joint ventures were not very encouraging. By the 1990s, the government was beginning to have a different attitude towards these projects. The persistent lack of profit of the Solomon Taiyo joint venture project over twelve years was well known among the public. There were joint-venture projects such as the Sasape Marina Ltd in Tulagi and the Oil Palm plantation project in Guadalcanal. While these projects had contributed through taxation to the state budget, they were seen as having no direct beneficial impact in improving the status of the people whose land was used for these projects. The experience with Solomon Taiyo, which reported losses each year, did much to discredit this approach. Thus, when the Gold Ridge project was being developed, the state opted to stay out of the joint-venture and allowed Ross Mining NL, the parent company, one hundred per cent ownership. This did not mean that the state did not care about the project, but rather opted for a contract with the company to encourage economic growth. However, in contrast, landowners saw the relationship between the state and the mining company as dubious. This was because landowners saw themselves not just as beneficiaries, but also as resource owners who did not need state recognition. Landowners saw

themselves as equals of the state and the mining company. Thus, while the state concentrated on the process of mine development, the landowners were more concerned about their ability to make changes to the mining project itself. It was obvious then that the landowners' litigation was not a simple matter of asking for more benefits from the mine, but rather questioning the basis on which the agreements were made. In other words, why should they accept the position delegated to them?

It is through the study of this experience that this research attempts to understand the nature of the relationship between landowners and the Gold Ridge Mining Project. The purpose is therefore to examine the problems of power sharing implied in natural resource use. Is there an inherent problem in the relationship between kin groups and natural resource projects? If there is a problem, how has it been manifested? Conceptually, the structure of relations is about the way actors pursue their interests and the way they relate to others.

Sociologists' views about relationships are that they have the features of mutuality, expectations, and they involve social actions. According to Cohen (1968:13) social relations,

...are fundamentally, sets of mutually adjusted expectations of reciprocal social actions. These expectations define rights and obligations. Sets of interrelated rights and obligations define social statuses and roles. But, these definitions must imply mutuality at the outset. One man's rights are simultaneously, another man's obligation.

The concern here is with existing social status, roles, and expectations that are necessary for sustaining a particular form of social relations in the context of natural resource development. In other words, it is about the structure of social relations and not just about the process of relating. The concept of 'articulation' is a structural concept chosen to examine the nature of social relations in natural resource use. The word 'articulation,' according to the Merriam-Webster Thesaurus, is derived from the word 'articulate' which is a verb also used or associated with the word 'integrate'. Similarly, 'articulate' is also associated with verbs such as 'connect', 'join', 'order', and 'systematise' (Merriam-Webster Thesaurus 1989:39). 'Articulation' in terms of 'systematisation' is defined as the act of creating a system. In other words, a system is

articulated when its diverse parts have 'meaningful' relationships to each other and to the whole (Merriam-Webster Thesaurus 1989:563). Put simply, 'articulation' is about the structure of social relations.

In analysing the problem of articulation of relations in natural resource development in Solomon Islands, this work examines natural resource development projects, and in particular the mineral resource development sector. While the focus of this analysis is primarily on the relations surrounding the Gold Ridge Mining Project, other natural resource development projects are also discussed in the thesis. Earlier examples of natural resource development relations in Solomon Islands have also been included.

In addition, mineral cases from Papua New Guinea (PNG) have also been analysed to provide further examples to highlight the nature of relationship between kin groups and commercial projects. Four mining development projects in Papua New Guinea are included. They are the Panguna, Ok Tedi, Porgera, and Lihir mine projects. The objective of extending the study to include cases apart from the Gold Ridge project is to demonstrate experiences in a context other than the Solomon Islands.

The analysis of the idea of articulation of kin groups and project relations aims to contribute some knowledge towards understanding the forms and practice of relations in natural resource development in Solomon Islands. In addition, the study aims to analyse specifically the structures and processes influencing kin group and mine project relations. Therefore, this work expects to increase the awareness of the position of kin groups in natural resource development projects.

Conceptual background

The core argument of this thesis is that while there have been improvements in the relationship between kin groups and natural resource development projects in both the Solomon Islands and PNG, such improvements are process-related. What remain to be improved are the structures that underlie these processes, in other words, this refers to those processes that are applied in natural resource development projects. The thesis argues that through the history of natural resource development there is a continuity of a specific form of relationship. This form is that of 'instrumental

articulation'. The elements of this particular form of relationship can be recognised in terms of structures that predominate in the relationship over natural resource use. There are three major processes identified as criteria to recognise instrumental forms of articulation. These include: forms of *actions* taken in carrying out the natural resource development project; the types of *interactions* promoted to achieve project development; and the kind of *attitudes* displayed towards the project goals. These structures and processes guided the research to recognise instrumental articulation.

Instrumental articulation has persisted through the history of natural resource developments in Solomon Islands and PNG that involved kin groups. This is indicative through the type of structures and processes imposed by the state. The imposition of the colonial state in Melanesia led to material enticement as well as the use of legal codes as instruments to sustain this form of instrumental articulation. Once established, this form of relationship was able to reproduce itself over time.

Instrumental articulation was not only endemic to the colonial period alone, but also to the post colonial Solomon Islands because it remained after political independence. One factor is that, during the postcolonial era, this form of relationship served the interests of a new indigenous elite and their external associates, the state. The acceptance of the state as an international regime, without due considerations to the social environment in which such institutions are rooted, meant local demands were easily ignored. Thus, external values dictate relationships over internal issues. The locally based new elites, who are familiar with external values, sustain the instrumental articulation of kin groups.

The second factor supporting the continuities of state methods of instrumental articulation is the imposed doctrine of the paramount role of the state. It leaves little formal room for reciprocal forms of relationship. While the state is a necessary overarching institution in Solomon Islands, it is not the only institution of importance to the Islanders. In addition, the state is an imported institution and often does not recognise institutions such as kin groups that existed before its introduction. Thus, kin groups, in terms of their traditional values, norms and roles, remain in opposition to the state's methods that are applied in natural development projects. Therefore, this study is concerned with the form of articulation and the practices that sustain the

peripheral position of resource owners in project development relations in Solomon Islands.

The persistence of instrumental articulation has a strong relationship to the state's objectives as an actor that appropriated control over natural resources within kin group territories. The basic aim of natural resource development is to gain economic benefit by maintaining a position of influence that enables extraction of maximum profit from the resource. Thus, the position of players, the values used to justify the ends, and norms promoted, are structures that are vital to the way the actors perceive them. In addition, there are processes involving the type of actions taken to meet the goals of the project. The forms of interactions promoted in project development and attitudes towards the project goals are also vital. In a sense, it is the competition between past kin group traditions on one hand and the imposed state on the other that accounts for the tension between kin groups and natural resource development projects. This tension is analysed throughout this text by describing the historical context of kin group experiences in natural resource (mineral) development relations. The cue for identifying evidence involved the norms, roles and values that influence such relations, and the processes used in establishing relations with kin groups over mining development projects.

After political independence in 1978, many indigenous communities in Solomon Islands had hoped that the indigenous 'brothers' in government would be different. The new indigenous leaders that took over leadership from the colonial administration were then expected to have immediately recognised the perceived discrepancies between indigenous communities and the former colonial government. The perceived discrepancies had much to do with the status of indigenous communities, their natural resource rights, and their cultural identity. The colonial land laws that appropriated customary land for plantations and subsequent policies on use of natural resources were the basis for the long-term grievances with the colonial state. Thus, kin group expectations of the benefits of political independence were high. For example, one of the expectations was that there would be allowed a full indigenous institutional participation. The fathers of the Solomon Islands political independence movement tried to recognise these expectations through symbolism such as the Preamble of the National Constitution, where it states:

... We the people of Solomon Islands, proud of the wisdom and the worthy customs of our ancestors, mindful of our common and diverse heritage and conscious of our common destiny, do now, under the guiding hand of God, establish the sovereign democratic state of Solomon Islands; As a basis of our united nation DECLARE that:

(a) all power in Solomon Islands belongs to its people and is exercised on their behalf by legislature, the executive and the judiciary established by this Constitution;

(b) the natural resources of our country are vested in the people and the government of Solomon Islands...(Leigh N.E, 1978:145).

However, even this pledge did not specifically give any special privileges to kin groups in Solomon Islands, although implication for political participation was suggested in section 114(2) of the National Constitution where it provided that,

Parliament shall make provision for the government of the provinces established under this section and consider the role of traditional chiefs therein (Leigh N.E 1978: 195).

Issues of land tenure and political autonomy are important to kin groups. Kin groups want a state that recognises them as equal partners in management of Solomon Islands. Where state dictates the terms of change to kin groups, this is not partnership in development. However, priorities for the state in Solomon Islands were the issues of material wealth rather than the development of a sound internal relationship.

In recent years, the government's way of explaining and resolving the ever-increasing economic gap between 'haves' and 'have nots' has been through structural reform. The wisdom of this economic thinking is that the improvement of the state machinery is necessarily beneficial to the people at large. The assumption is that the state is the patron of development of Solomon Islands, and thus development becomes state-centred in approach. The fact that the majority of the population is illiterate also facilitated the state-centred approach, through the 'conventional wisdom' that indigenous people, by being illiterate, are ignorant. While kin groups are ignorant about many aspects of the imposed state, they are not so ignorant about what constitutes a good long-term relationship. A state that only serves the interests of a small minority in the community is inadequate in meeting its obligations to the community at large. The recent crisis in Solomon Islands, known as the 'ethnic

tension,' arose from many issues including state and kin relationship over resource distribution as well as kin group political identity.

This pattern of marginalisation of kin groups seems widely shared in Melanesia. For example, despite the fact that much exploitation of natural resources has taken place in Papua New Guinea, Vanuatu, and Solomon Islands, there remains the concern that this development has not met the goals of indigenous groups at all. Connell and Hewitt have observed a similar pattern in the Australasian region when they asserted that:

...In the Australasian region, even at sites such as Vatukoula (Fiji) and Panguna (Papua New Guinea), where mines are established when colonial governments had little concern with indigenous land rights, social and regional equity, environmental management or sustainable development, some individuals and groups have benefited from access to new services and resources. Such benefits, however, have been far from unequivocal. Dispossession, displacement, marginalisation, and alienation in periods of rapid change precipitated by mineral-based industrialisation have produced, and continue to produce; a legacy of sometimes-tragic dimensions for many previously isolated indigenous groups (Connell and Howitt, 1991:196)

This research recognises this line of argument but extends this view to argue that much of the negative effects of development affecting kin groups relate to the existing forms of articulation, in other words, the thesis is a study of the nature of articulation of kin groups as demonstrated in the selected cases of natural resource development projects in both PNG and Solomon Islands. This Study is the first of its kind in the context of Solomon Islands. This is not because the issue of articulation of relations has not been important in the past. The reason is due to two central factors. The first is the general assumption that the state has the right to use natural resources for the development of all citizens. This entailed a passive attitude towards the critical assessment of the state's role. It also meant that the kin groups' roles within the state in a new political environment received little political attention. Secondly, and more importantly, there has not been any actual mining development taking place in the country, despite limited attempts in the past. Thus, research about mining in Solomon Islands was limited. Finally, there are very few students from kin groups with the opportunity to do this particular study. These are some of the reasons for carrying out a study to try to understand the issues of social relations and the implications these

forms of relations have for kin groups in Solomon Islands through Social Anthropology.

The idea of articulation is the guiding concept for this research with the aim of trying to understand the nature of relationships between kin groups and natural resource development projects in Solomon Islands. The choice of this concept as a framework to explain natural resource development relations in Solomon Islands derives from anthropology and is based on the assumption that the nature of human relationships matters in the development processes. In other words, the form of relationship applied in practice over natural resource use dictates the results of natural resource development processes. Thus, the concept of articulation is selected to guide this work.

1.1.1 Origin of articulation concept

Conceptually, the origin of the idea of articulation can be traced to the early works of philosophers such Vico and Saussure (Hawkes 1977:11-29). Vico, in his study of 'primitive' society, tried to establish the logics behind mythology. He claimed that myths are in effect histories of the 'Primitive man'. The idea is that myths are the result of human experience of the physical environment and that it is man's attempts to make sense out of the complexity of the environment. Humans are, by nature, structuralists. Hence, primitive man is able to *articulate* his experience with the world around him and make sense of it. Mythology therefore serves the *articulation* or nexus of making meaningful human experience of the physical environment. In essence, articulation is a relational concept.

This relational concept has, since Vico, been developed and applied by Saussure. Saussure, as a linguist, had the view that instead of observing phenomena in the world as discrete entities, suggest the world should be seen in relational terms. It is in the relationship between objects that their features emerge. Saussure demonstrated that in the study of language, meaning is created because of the relationship between a 'sign' and what the 'sign' stood for. The sign he called the "signifier" and what the sign stood for as the "signified". This relationship between signifier and signified is a

sequential form of relation and its characteristic is that it occurs through time. Semioticians have called this form of relations as *first articulation*.

On the other hand, meaning can also be created when a sign relates to other signs. This is a vertical form of relation, and the structure is one of *differentials*. The fact we can select one sign among other existing potential signs makes us recognise the features of our selected sign because of its contrast to other signs. The structure of these relations is considered a *second articulation*. Where there is no relationship, either vertical or sequential, such form is a *nonarticulated relation*.

This form of analysis has become the root of contemporary structural analysis. The relevance of the concept of articulation for this study is based on the two forms of articulation referred to as 'first articulation' and 'second articulation'. This is because sequential forms and differential forms of articulation matter in creating social meaning. Signs in the social world mean different things for different actors and differ in their importance. In the context of this work, when describing the nature of the relationship between different actors in the context of natural resource development, it is assumed that historically specific forms of articulation have been predominant. Simply stated, articulated relations can either be 'sequential' or 'differential' in nature, but once a form is selected the outcome differs for actors involved.

1.1.2 Application of articulation in anthropology

In the field of Social Anthropology, structural analysis has been applied to understand social systems as kin society. Early anthropologists applied this method of analysis in kin societies to explain *cultural persistence*. For example, structural-functionalists like Radcliffe-Brown argued that such persistence could be explained through functionalism. The idea is that elements of a social system serve specific roles for the reproduction of that system. Thus, social systems persist because the structure and the processes that reproduce that structure are mutually reinforcing. However, even within a context of a simple social system, such as that of a kin group, structure undergoes *social transformation*, as do the processes that produce the structures. One example that demonstrates that structure can undergo transformation beyond its

original identity was reflected in Sahlins's application of structural analysis to Hawaiian 'first contact' reconstruction.

Sahlins explained that in a social situation of cultural contact, actors from each cultural group interpret the 'other' based on their own worldview. This results in differences and sometimes leads to mutual criticisms of each other's particular worldview. But, beyond this mutual criticism there is also a historical process. That is the role of *sign* in action. Sahlins explains that signs or codes play an important role in action. Each actor in a social situation selects or chooses a line of action based on the signs of its worldview. Hence, choosing a particular *sign* or code over other possible *signs* in essence subordinates others. This selection process closely resembles the form of relations that Saussure denoted as *synchronic* or differential relations. On the other hand, where an actor chooses a sign or code, it is because it makes a *difference* to that subject or serves that subject's interests. This resembles *diachronic* relations or sequential relations.

The relevance of both concepts of diachronic and synchronic relations in social situation is that actors act according to signs by 'selection' and by the 'interests' that such actions serve. Here the goal of the actor, and the signs selected against other signs because they serve to meet their intended goals, are relevant factors in social relations. In other words, historical processes unfold in a dynamic fashion between the 'practice of structure and the structure of the practice' (Sahlins 1981:72).

The focus of this work in using the concept of articulation is to suggest that actors, who act as agents of the state, select signs and interests that serve their own goals at the cost of actors representing kin groups. One example of this relates to the formation and establishment of the state itself. Declaration of Solomon Islands as a Protectorate in 1893 made the idea of state significant. However, this significance did not mean the same thing for both the agents of state and those ruled under such a state. The state as an imposed institution had rules, roles, and values that differ to kin groups' own institutions under the state's rule. In other words, the state's structures served its own agents and goals rather than the goals of the kin groups. Equally, in practice the attitude, actions, and forms of interactions that agents of state apply in relations to kin groups also served itself. Therefore, this thesis argues that the

persistent undermining of kin groups in contemporary natural resource development relations is a systemic problem. The state is serving its own purpose and goals at the cost of the collective goals of kin groups.

1.1.3 The concept of state

The idea of *state* is a form of purposive social order. According to Larmour, the state can be conceptualised in four ways: organisational, functional, ethical and international (Larmour 1996:3). Organisationally, there is the ability to influence local resistance, or external forces. Functionally, the state is seen in terms of its primary duties such as defence, police and infrastructure, which benefit society. Ethically, the state is seen as having the legitimate authority to use violence. Internationally, the state is recognised as a regime (Larmour 1996: 4). Each of the perspective of the state reflects the emphasis placed on the role the state plays in society. In other words, all these different perspectives of the state have the common feature of 'control'. For instance, organisationally, the state is characterised in terms of control of internal resistance and external forces. Functionally, it is also characterised in terms of control through defence and infrastructure development. This function is also justified in terms of legitimising the use of force. The international perspective of the state is also characteristic of control because it allows international values to permeate through the state, even when such values exploit the internal elements of the state. Thus, although the state is based on control, it is the forms of control used and justified in the name of state that matter to members of kin groups. This is particularly the case where the state defines the goals of social development, and the parochial goals of kin groups tend to be excluded. For the purpose of this work, the concern here is with the way the state formulates relationships with kin groups over natural resource development.

There are different ways of interpreting what the state is supposed to be, even as an organisation. For example, according to Scott (1992: 22-25), the state as an organisation has three different perspectives. These are the Rational, Natural and Open System perspectives.

The Rational perspective defines organisation as conscious, deliberate and purposeful cooperation (Barnard 1938:4, in Scott 1992:22). The state is a central coordinative

system, with a specific internal structure and coordination (March and Simon 1958:4, in Scott 1992). Thus, the state is a "formal organisation" that has been established to achieve certain goals (Blau and Scott 1962, Etzioni 1964:3). Thus, the rational perspective conceives organisation as collectivist, with specific structures designed to achieve certain specific goals. However, while the state has specific goals, such goals may not be shared goals in some specific social situations. For instance, in Solomon Islands, the state's control of mineral resources is not a shared goal. Kin groups with specific customary land territory seemed to consider the state as a mediating organisation between kin groups and foreign actors. This was particularly the case in terms of mediating access to local natural resources from outside. Thus, if the state is to be considered as having specific structures with specific goals, then the state in Solomon Islands needs to revise its goals and structures with kin groups.

Apart from interpreting state organisation as rational, the state can also be interpreted as an organic system. The Natural systems perspective views organisation as an organic system that struggles to survive and maintain itself as a system. According to Scott, the Natural system sees organisation as:

...collectivities whose participants share a common interest in the survival of the system and who are engaged in the collective activities, informally structured, to secure this end (Scott, 1992:24).

The state as an organisation may reflect the features of being organic, struggling to survive and to maintain itself as a system, but if the state, as an organisation, is not organic in the first place, the system is dysfunctional. In a situation where the collectivities, in this case kin groups, do not share the goal of making the system survive, the state is at odds with its collectivities. Thus, the state in an ethnically diverse society has to justify the reasons for its survival. In other words, in some situations, the state is not the rule but the exception, and therefore the problem is one of making the state meaningful for the diversity of kin groups.

Apart from the state being interpreted as either a rational or organic organisation, it can also be interpreted as an open system. The Open System perspective sees the organisation, not as a closed system, but subject to external influence. Thus, according to Scott, the Open System perspective sees

an organisation not as a formal structure or an organic entity, but as a system of interdependent activities (Scott 1992:25).

Yet, while the environment in which it is located affects the state, such an environment could also be reinforcing existing forms of structures.

The state, as found in the Solomon Islands, has features that are reflected in all three perspectives of organisation. These include purposeful behaviour (Rationalist), self-maintenance (Naturalist), and being influenced by the environment (Open System). State organisations that have their roots in a colonial heritage, within the environment of diverse kin group societies, are also inherently hegemonic. Such states create an environment of tension between the state as an introduced system, and kin group systems. State/ kin group tension is different from commonly known tensions within the state as an organisation itself as alluded to by structuralist such as Etzioni, whose view of state organisation characterises it as the 'Organisational dilemma':

..the inevitable strains which can be reduced but not eliminated between organisational needs and personal needs; between rationality and non-rationality; between discipline and autonomy; between formal and informal relations; between management and workers, or more generically, between ranks and divisions (Etzioni, 1964: 41, quoted in Scott, 1992: 97).

State/kin group tension is a structural tension rather than a process tension, as outlined above. It is a tension of signification, to use Sahlins' terminology. It matters to kin groups that the state selectively pursued goals and interests in the name of nation building in appropriating the use of natural resources. Yet, it seems that kin groups are undermined persistently over time.

In the context of Solomon Islands, the tension between the state and the kin groups resurfaced more strongly after political independence. Independence meant, for some of the kin groups the restoration of what they had lost since colonisation. This included land and leadership roles. Nevertheless, following independence, the new state appeared to reconsolidate and sustain itself. It maintained the state system inherited at independence, and continued to operate as usual. The only changes were to replace expatriates with local government agents. The result was that kin groups

with pre- colonial social systems began the demand for a meaningful relationship with the "imposed" state.

The problem then was the need to reconcile existing tribal communities, which have some degree of autonomy. This problem is not unique to Solomon Islands, but is a widely shared phenomenon in many postcolonial states. For example, in post colonial Africa, this idea of "reconciliation" has been debated in terms of integration, that is the idea that the nation-state should reconcile the existing post-colonial society with the newly formed state institutions. For example, Oyovbaire, writing on national integration in Africa, argued that the idea of national integration is often ambiguous. It tends to assume that state apparatuses, such as bureaucracies, actually function to integrate or disintegrate. It also assumes that a "nationally integrated political community" would necessarily serve the interests of the citizen (Oyovbaire, 1984:1). In this respect, Oyovbaire's experience in Nigeria suggested that national integration manifest itself in the dominant structure, in the values of production, and through redistributive activities (Oyovbaire 1984:1). National integration perceived in the light of colonial history of a developing country poses problems. Instead of integration, Oyovbaire argued that the concept of national cohesion is a better basis for estimating the ways in which the dominant classes view and articulate politics and political events in Nigeria (Oyovbaire 1984:2).

Cohen (1968:132) defines cohesion as resistance to division or secession. He argues that the condition of cohesion might be achieved through mutual interests, intersection of ties, allegiance to a larger unit, and the quality and strength of ties. The state is one of the most effective means for common allegiance, if it is recognised as a coordinating agency (Cohen 1968:132). Hence, the state could achieve cohesion through provision of facilities to members, providing means to sustain continued allegiance, and providing symbols for the identification for the units making up the allegiance.

In Solomon Islands, while the state is useful in bringing relative cohesion to society, it has also been the basis for kin group resistance. Kin groups in Solomon Islands have a long history of association with land and resources, so that unilateral control by the state is perceived as unacceptable. This is particularly the case when the state is

involved in coordinating natural resource development. It is the problem of articulating the rights of kin groups with national interests that remains the issue. The analysis of the forms and practices of articulation of relations among kin groups and natural resource projects forms the basis of this work.

1.2 The study area and scope

In examining the form and the practice of development relations in natural resource development, the main primary case study area is the Guadalcanal Province among the Matoba people. The traditionally known Matoba have, over the years, also been referred to as the 'Gold Ridge people'. This refers to the Matoba land area where many mineral explorations have occurred over the last decades or centuries. Guadalcanal is the largest Island in the Solomon Islands archipelago, and is well known among the Americans and its allies from the World War Two campaign against the Japanese during 1942-43. Today the Island hosts the administrative headquarters of the state of Solomon Islands.

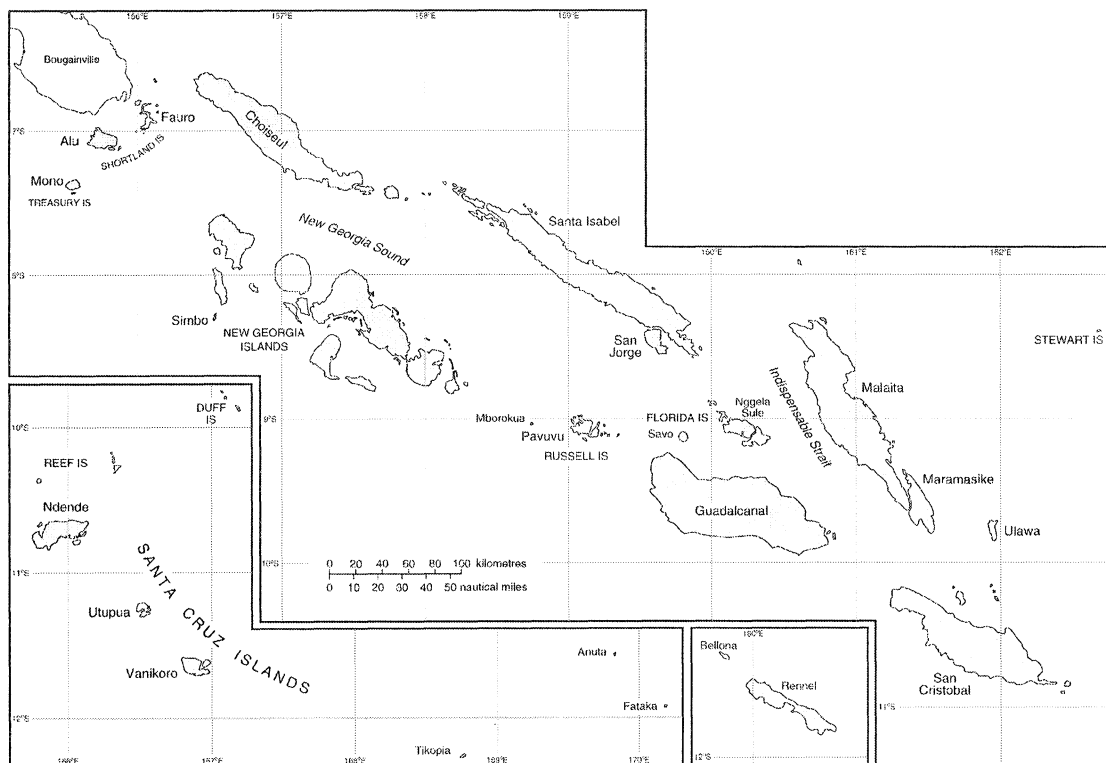


Figure 2: Detail Map of Solomon Islands showing Major Islands including Guadalcanal.

The population of the island, like other islands in Solomon Islands, has rapidly increased over the years. It was reported that in 1976 the population was about 31,677. This had changed by 1986, when the population grew to 49,831, which is about 4.3 % annual growth rate (Statistics Office 1988:2). According to the 1999 Population Census, the population has now increased to 63,000. Culturally, people of Guadalcanal Island are divided into seven major cultural groups. These are as indicated in figure 2 below:

1. Marau,
2. Longgu,
3. Lengo,
4. West Guadalcanal,
5. Talise, Mbirao,
6. Malango, and
7. Mbirao.

Some of these seven linguistic groups have dialects. The focus of this study is on the Malango linguistic groups in central Guadalcanal.

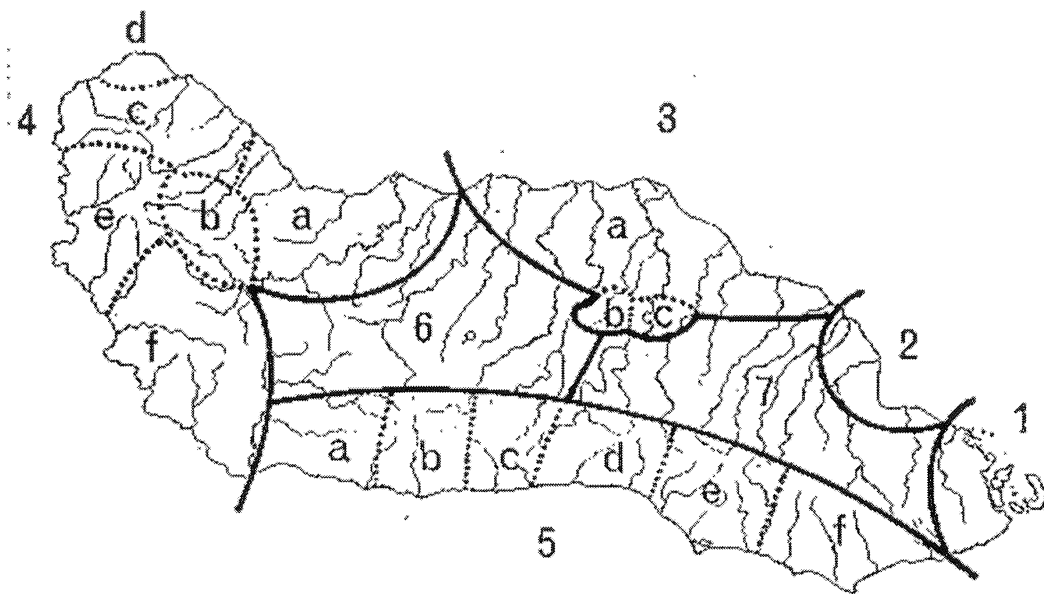


FIGURE 3: Map showing the major linguistic divisions in Guadalcanal Island.

The focus of this study is on the Matoba people who are a sub-tribal group within the Malango social group. The Malango people, as a cultural group, numbered about 4,052 people in the 1999 Census (Statistics Office 1999). However, within the Malango linguistic divisions there are dialects, of which one is the Bahomea dialect. It is the Bahomea people, or traditionally Matoba people, who are now also referred to as 'Gold Ridge people'. The Gold Ridge Mining Project development used for this case study directly concerns these people. The landowners directly affected by the project had a population of 1,200 women, men, and children in 1995. This was about a fifth of the population of the Malango social group.

The Matoba people or Gold Ridge people are members of two major clan groups that are further subdivided into sub-clans. The two major clans are the Manugaravu and the Manukiki. The cosmology of this people claimed that the origin of their people came from two primordial 'sisters' who are referred to as the big and small 'sisters'. They were named 'Manugaravu' and 'Manukiki' respectively. The two cosmic sisters are also symbolised by the totems of 'eagle' and 'hawk' respectively. Each cosmic sister is then responsible for the sub-clan members of the Matoba society. The eighteen sub-clans of the two moieties made up the population of 1,200 individuals of the Matoba society directly affected by the Gold Ridge project. The word 'Matoba' refers to a 'reclining stomach' and depicts an ancient event where the land that is now called 'Matoba' had reclined into the earth. The social structure of the Matoba people is based on the reciprocal relationship between the two moieties. Marriage is exogamous in that members of each clan can not marry within their own clan but do so in the other corresponding moiety.

The Matoba people lived mostly in the interior of the Island. Their location between the Chovohio and Charivuna streams is ideal for their self-subsistence needs. The merging of these two streams with other small stream systems from the Balande River allowed the flow of minerals to the coast. This led to the discovery of gold traces that resulted in exploration of the area. The Spanish explorer Mendana in 16th Century created the mythology about land with great abundance of gold, although they could only find a trace of gold at the Balande river mouth. Some two centuries passed before such mythology attracted further exploration. In 1896, an Austrian expedition set out to the Malango territory that ended in perhaps the first clash with gold seekers

on the Island. Comprehensive gold search of the areas was done in the 1920s. In 1937 Solomon Islands Gold Development Ltd was then insured with a mining license.

Gold found in the 1950s on the Valebeabea land, led to the name Gold Ridge. This is in the heart of the Matoba area between the Chovohio and Charivunga streams. This period was important because the demand for carriers and helpers for the explorers attracted attention among the scattered hamlets of the Matoba people in the surrounding area. This meant more Matoba people came to settle around the area where exploration activities were being carried out. Thus villages in the conventional sense only formed in the late 1950s after more people moved and congregated in the area of exploration activity. Alluvial gold was essential to the Matoba people during this period.

1.3 Why the Gold Ridge project and the Gold Ridge people?

The articulation of the relationship between the goals of the modern nation state and that of the local community, with whom most of the nation's natural resources remain within their jurisdiction, has been problematic. Major natural resource projects in the country have, ever since political independence, attracted controversies and, in some cases, descended into political instability. Despite the increasing tension between kin groups and the state, the state rhetoric on national development has persisted. As the nation-state pursues nation-building, pre-colonial kin groups, remain marginalised, which in turn creates more suspicions about state activities in the name of development. Thus, there is a general knowledge that resource-owning communities in the Solomon Islands believe the state has marginalised them in natural resource development.

The perception of kin groups being marginalised is a new phenomenon that emerged after the establishment of the state. Some of the examples of joint venture projects in Solomon Islands are, the Solomon Taiyo Limited and the Solomon Islands Plantation Limited (SIPL). The latter project is a joint venture project between the Solomon Islands Government and Commonwealth Development Corporation (CDC) on oil palm development. This perception of landowner marginalisation is still in existence and witnessed in the Gold Ridge Mining Project on the Island of Guadalcanal. The

initial 'great hope' and the subsequent 'great disappointment' that followed the development of Gold Ridge project, are the important reasons for this research.

My interest in the problem of articulation of relations, in natural resource development, stems from two levels of experiences. The first is from my academic interest in the field of the Social Anthropology of Development, and secondly from the perspective of an indigenous person. As a kin group member, I recognise, through working for the state, the many difficulties facing indigenous communities in representing the entitlements of their people. It has been an uphill battle for indigenous communities against the forces of the state in the wider society. The failure of natural resource development to improve the lives of indigenous people highlights the disarticulation between the state as a coordinator of development and the tribal community as a beneficiary. This situation results in the tribal community perception of themselves as not only an unequal partner with the state, but also that their status as a community with its own legitimacy remains outside the framework of governance. Such perceptions and activities do not necessarily occur in empty space, but rather have social causes. However, whatever these social causes may be, they are often obscured. A central aspect of this obscurity is the 'acceptance' of the state as inherited from its colonial past, the basis by which it justifies the norms and processes that govern extractions of natural resources. The understanding of the nature of these norms and processes is vital to understanding relationships over natural resource development.

Despite the importance and the 'obscurity' of such social causes, this concern has not been an important part of Social Anthropology that traditionally deals with indigenous people, especially in Solomon Islands. It is my background in anthropology and my personal experience with heritage of kin society that influence the emphasis placed on this problem: *why is it that the articulation of kin groups with the state and natural resource development, like the Gold Ridge Mining Project, is a problem?*

In trying to examine this articulation problem, it must first be noted that this study does not apply any specific hypothesis, because it is not trying to test any specific theory. However, the study is guided by a view of structure, especially the concept of structure and processes or normative structures and behavioural structures. In other

words, the study is concerned with the nature of social relations, which are governed by mutual expectations, but where some expectations are more significant than others are. It is in the identification of the significant forms of social relations over natural resource use in both Solomon Islands and the PNG context that the problem of articulation is to be explored.

This study has faced some obstacles, especially during the process of planning the study of the Matoba community and the nature of their relations with other actors in the context of mining development. The first is that the case study approach has not been followed by intense fieldwork because of the untimely occurrence of the ethnic conflict in the Solomon Islands. The ethnic conflict, which lasted for almost two and a half years, directly affected the follow-up fieldwork of the Gold Ridge Mining case study. This conflict was between the Guale and Malaitans, of whom I am an ethnic member. In conflicts in Melanesia, social group membership is seen as more important than individual involvement. Therefore, not being involved with the conflict did not guarantee fieldwork safety for a researcher who is a member of one of the ethnic groups involved in the conflict.

However, I was fortunate in having been involved in the Project directly as a both a social researcher and a government agent between 1995-97. As a social researcher, I was engaged in the social mapping of the Project area in 1995. Following this, I was appointed as a Secretary of Mines in 1996-97, for the whole period of negotiation and development of the project. Much of the information used in the analysis was gained during this time. During the period of active conflict in Solomon Islands, further information such as government reports and other project documents were obtained in Honiara. This has been done to supplement my direct involvement in the project, and thus assisted the study in the difficult circumstances that made visits to the mine impossible.

An additional measure taken to provide more empirical data has been the extension of the study to consider other mining cases in another Melanesian country. The inclusion of PNG mining cases helps to provide supplementary data to demonstrate the basis of the thesis. Thus, this thesis begins by tracing the predominant form of articulation at two levels. The first level is aimed at providing a general perspective about the notion

of articulation. An historical approach is employed to enlighten the forms it takes and its effects on the rights of indigenous communities in relation to natural resource use. It attempts to ground the roots of existing forms of relationships between kin groups and the state within historical development. At the specific level, the research describes mining development projects to show the nature of relationships, as played out in actual events.

While not all the forms of structures that influence kin group behaviour are covered, the importance placed on both normative structures and behavioural structures inform the conclusion reached in this thesis. In other words, while the relationship among kin groups and state in the context of natural resource development projects may have improved over the years, participatory processes alone are not satisfactory unless normative structures that govern relations are included in development configuration. This claim is made only for the Gold Ridge case with limited extensions to other cases examined in PNG.

The thesis attempts to demonstrate in the subsequent chapters that existing marginalisation of kin groups is historically rooted in the persistence of cultural dominance of kin groups for purpose of natural resource exploitation. While participatory processes carried out during the formulation of mining projects are highlighted, these were superficial because the structure of relations continues to be asymmetric. The significance of this study is that to understand indigenous community behaviour one must understand its position and the structures that sustain such a position in the scheme of things.

1.4 Research problem and proposal

At the general level, the issue in this study is about the method or the practices that govern and are used in the interaction between kin groups, the state, and transnational corporations as expressed in natural resource development projects. Hence in the case of the Matoba people, the key questions that concern this study are:

- why is articulation of kin groups and natural resource development projects such as the Gold Ridge Mine in Solomon Islands a problem?
- What method or practice predominates in mining development project relations?
- What are the elements of this practice?
- What makes this practice marginalising to kin groups?
- What lessons can be learned from the existing relational practices?

In trying to answer these questions, the study relies on broad historical trends and selected natural resource development cases in two countries. In Solomon Islands, natural resource development projects apart from mineral resources are also outlined to demonstrate the patterns of articulation applied in resource development relations. This includes forestry, fisheries, and agriculture, which constitute the previously important national income generating projects until the opening of the Gold Ridge Mine in 1998.

In PNG, four of the most important mining development projects in PNG are outlined to demonstrate the patterns of relationships over time. This includes the Panguna mine, Ok Tedi, Porgera and Lihir projects. By examining the patterns of articulation used in resource development, the study expects to shed light on the structure of relations in kin groups and state sponsored project relations. Thus, the selection of the Gold Ridge project as a major case for this study, supplemented with PNG examples, forms the empirical grounding for this work. These cases in PNG and Solomon Islands are the basis for justifying my argument about the continuity of the imposed state's methods or specific form of articulation of relations over natural resource development goals.

The proposition to be considered in answering the problems stated above is that articulating kin groups or landowners in mining development projects will remain a major problem in Solomon Islands and PNG. There will always be difficulty with kin groups unless the position of kin groups and the structures that underlie natural resource development relations are redefined and accommodated in the relationship over resource use. It is argued here that, as at present, landowners' participation is

based mainly on situational processes, to the exclusion of the norms that govern processes in mining development. In other words, landowners are simply being "persuaded on site" and contain their expected discontent. This thesis attempts to question the norms and behaviours that govern relationships for natural resource development activities. I argue that persuading landowners on site, without addressing the norms and rules that govern mining development activities, is destined to fail in sustaining landowner support for a project on a long-term basis.

1.5 Methodology

The research examines what is known and perceived about articulation of relations at two levels of analysis. The first is at the broader level, where the historical forms of articulation of relations between kin groups and project developments are assessed. At the second level, and more specifically, are the forms and practices of articulation of relations as played out in the case of the Gold Ridge Mine Project.

The extension of the study to include PNG provided other instances where forms and practices of articulation have occurred both at a general level as well as in specific project cases. Since the study focus is on the forms of articulation of relations, it is based on the structuralist approach that recognises social systems as having mutual interdependence of structure and process. The focus on analysing methods of articulating of relations assumes that the process approach alone cannot explain adequately the nature of social relations without taking into account the structures that underpin such process. Hence, the study describes selected project cases in terms of historical context, structures imposed by the state and the process applied to meet the demands of the state in the context of natural resource use.

The major event of analysis is the mining development case. A mining project is a complex event that passes through major stages in its development process. Mining consists of exploration, development, operation, and mine closure. Relationships change as the project progresses through these stages. This study goes beyond these specific events in mining development to analyse their overarching structures. These are the rules, roles, and values that underlie the processes for articulating relations in a specific project. Thus, the thesis chapters are organised to show the meaning and

application of the notion of articulation. They describe forms and practices of articulation in natural resource development, especially mining project cases as they evolve over time. Simply, the study describes the persistent conventions used in mineral resource development relations that sustain the gap between the goals of kin groups and those of the mining project itself.

What must be made clear at the outset is that any choice to research the nature of articulation in the mining sector must first acknowledge that mining development project relations are complex. For minerals, like many other natural resources, the process of converting such raw material into tangible benefits requires the formation of various complex relations. It involves major stakeholders. For example, the state's interest is in the development of such resources for purposes of creating economic growth, employment and taxation revenue for the state. The mining company's interests, on the other hand, are to maximise profit. The kin groups, whose livelihood depends on the environment, take a gamble based on their expectations for positive change to their existing lives. While these expectations are often mixed, they are not as unreasonable as some might have us believe. Such expectations culminate from a long history of contact. A history of contact with the outside world created a desire for external goods within the kin group society. It is the kin group's desires for external goods and the search to meet this desire that makes kin group members take development promises seriously. These promises are those that the state and mining company promote among landowners during the exploration and development phase of a project. Kin groups directly affected by natural resource development expect that if there are to be benefits, they should go first to those groups directly affected by the project. In simple terms, if kin groups are willing to sacrifice the land upon which they depend for survival then, unlike the state and the transnational corporations for whom such a project is usually one of many, the goals of the kin groups involved have to be clear. The study does not focus on kin group leaders and their relationship with their kin group. That would amount to a study of the effect of mining. On the other hand, a study that focused on the processes of interactions alone would amount to a description of the events leading to establishing relations without seeking to explicate the structures through which such processes are enacted. Such a study would focus on the historical process of establishing relations alone. The basic concern of this study is to describe the forms of articulation, identify the predominant forms that

persist in natural resource development relations in Solomon Islands and PNG, and how such forms of articulation marginalise kin group expectations.

Firstly, on the historical front, the study outlines the historical context in which colonisation and kin groups formed relations, and how relationships persisted over time. Secondly, apart from the historical context, the study examines specific forms of articulation within mineral resource development projects. This is done through personal experience in the development of the Gold Ridge Mining project. The use of self-reflection, assisted through the analysis of project documents, is carried out on the structures and the processes that form a part of the development of the Gold Ridge project. For example, the focus is on normative structures, such as roles, rules, and values that are used for the project as well as the behavioural structures such as actions, interactions, and attitudes that are made manifest with the aim of achieving the state's and the company's perceived goals. Recollection and documentation describe the existing practices of the mining development project. As government's chief negotiator in the Gold Ridge project, with the company and the landowners, the focus is on the government's position, and the positions represented by landowners. But, as found in any relatively large natural resource project, while the state, the company, and landowners are major players, they are not the only players in such projects. There are also other views and interests that arise through the course of a project. This includes downstream groups, lawyers, and business groups. The description of the different phases of mining projects is very important, as it is through these phases of development that structures and processes emerge and decisions are taken based on those premises.

1.5.1 Theoretical perspective

In the attempt to analyse articulation forms and practices, the study examines the structure of relations. This is in contrast to, say, a researcher examining impacts of relationships, which concentrate on outcomes of projects. Such a study would place emphasis on the consequences of natural resource use, such as environmental and social costs of natural resource projects. Similarly, a study that places emphasis on kin groups and their perceptions alone would require ethnographic work among kin

groups. This type of study would simply examine kin groups in isolation. The same could also be said of a study that investigates the role of the state or the mining company. Such a study could have investigated the role that the state plays in trying to achieve its development goals. The choice of this study to investigate the structure of relations is motivated by the view that there is an articulation problem in Solomon Islands and PNG, which involves indigenous people and projects.

There are two dimensions of articulation that are considered relevant for analysis. The first is that of *vertical relations* of actors to the goal of the actions. For example, in the case of natural resource development, the issue is what the goal of natural resource development means to the actors. The second is that of *horizontal relations*, which refer to whose interests the goal of natural resource development serves. A situation where at least two actors interact to achieve certain goals, and the form of interactions favours one actor over the other consistently, is presumed to be instrumental. To show that an existing form of articulation is instrumental, one has to focus on the elements of articulation and show how such elements function instrumentally. For example, in terms of vertical relations of actors to goals of actions, to what extent are the rules used in governing the project, the values used to justify the goals of a project, and the roles played by each actor instrumental? Equally, in terms of horizontal relations, how are actions, interactions and attitudes towards the goal of project development instrumental towards certain actors? These elements of articulation are analysed to show the form of articulation and the practices persistent in natural resource use.

The major actors in the Gold Ridge project are the Solomon Islands Government, Ross Mining NL, and the Matoba Community (also known as Gold Ridge landowners). The description of the historical context leading to the development of the project during 1995-97 constitutes an important part of this thesis. The Gold Ridge project has another important role in its selection as a case study. It is not only the first commercial mining project in Solomon Islands, but also it has been thought that by learning from PNG mining experiences that this project should be the model project for Melanesia. In a sense, it is the disappointment that followed in the attempt to achieve this goal that prompted this research work. This study therefore tries to analyse existing forms and practices of relations and in so doing explain the reasons

for disappointment among landowners. The examination of the PNG and Solomon Islands cases centres on the following research questions:

- what are the forms of articulation found in PNG and Solomon Islands mining development projects?
- are there reasons to believe that landowners have been inadequately articulated in mine projects?
- what are the possible causes for instrumental articulation of resource owners?
- what evidence is there to show that some forms of articulation are conducive to a stable working environment and some forms are not?

The type of questions asked above demands an examination of the structure of relations in mining development projects. Using structural analysis, the study aims to show the forms of relationships and practices that exist between landowners and the mine. The study explores the historical roots and expressions of forms of articulation that are involved in natural resource development. Apart from the form and the root of articulation that is predominantly applied in natural resource use, the study also describes how such forms of articulation have persisted. Through the analysis of the Gold Ridge project, the study aims to show that many of the landowners' demands remain outside socially acceptable practices as defined by existing forms of articulation in the mining sector.

1.5.2 Case study

The Gold Ridge project in the Solomon Islands was the first of its kind in the entire country. As the Secretary to Mines, the project was directly under my responsibility for its implementation on behalf of the state. This experience with the project was an important basis for carrying out further research on this project. The Gold Ridge project was subsequently closed in June 2000. It had operated only since June 1998. The closure was a result of what was propagated by both the local and the international media as "ethnic tension". It seems it would have been more appropriate to call it "resource conflict". This event was important in that it prevented further field research at the Gold Ridge project. I retained the Gold Ridge project as a case study,

to use primary and secondary source materials available and my personal recollections. To supplement the available material, I have selected additional cases in Papua New Guinea. This was one of the contexts for a case study approach.

1.5.3 Primary sources

The focus on the Gold Ridge project case meant that much of my primary data is based on information obtained during 1995-97. In addition, many of the experiences witnessed during the implementation of the project have been first hand, although in writing this has been viewed in the light of self-reflection. It is impossible to cover every aspect of the project. Given the small size of Solomon Islands' economy, the project became very significant as an investment project. The use of my own personal records, diaries and various manuscripts used during the whole processes of the Gold Ridge mining development form the guidance for the reconstruction of the Gold Ridge project in terms of analysing the relationship between kin groups and the project. Much of my recollection as a social researcher in 1995 and government chief negotiator between 1996 and 1997, forms the central focus of this interpretation. As a researcher in 1995, I visited most of the villages of Matoba, held meetings and investigated the social structure of the Matoba people. This research was part of the government-mining company approach to finding means to establish the Matoba community association known as the Gold Ridge landowners' association. Much of the information collected during this time was relevant to the government at that time, but is also relevant now for self-reflection about the project. In my role as government employee and chief negotiator, my presence at negotiation processes with landowners, provincial government, Ross Mining NL and other departments of the Solomon Islands government provided me with the opportunity to interact with different interest groups in the course of the project development.

Despite this close involvement with the project, I revisited the project only once in September 1998. The following year, the country descended into ethnic conflict after the Guadalcanal militants forcefully removed Malaitan labourers and settlers on the Island. The Gold Ridge and other major projects were directly affected by the ethnic tension as reflected in their closure during 2000. For this reason, the study has extended its data collection to involve secondary data not only on the Gold Ridge project and other natural resource projects in Solomon Islands, but also by providing

descriptions and analyses of mining project cases in the neighbouring country of PNG.

1.5.4 Secondary sources

The use of secondary data involved archive records, government records, media prints, consultant reports, and published works on natural resource development, especially in the area of mining. Literature on the PNG mining industry is much more available, as expected, than for Solomon Islands. Apart from the Gold Ridge Mining Project, and attempts to mine bauxite in the 1970s (Fitch 1971:1) mining is not an industry in Solomon Islands as yet. Hence, other natural resource projects such as forestry, fishery and agriculture have been briefly described to give a sense of the forms and practices of articulations or relations in the Solomon Islands context.

1.5.5 Research limitations

The major limitation that placed significant constraint on this research project was the unpredictable effect of ethnic tension in the Solomon Islands that occurred during 1999 and 2000. Since the choice of the study was to document and analyse the Gold Ridge Mining Project on the Island of Guadalcanal, the ethnic tension that arose on the island prevented any return to the project site. Apart from my previous direct involvement in the project between 1995 and 1997, there were only three other visits to the Solomon Islands during the period of this research. The first was in August 1998 during the opening of the mine, and the other three visits mainly to the capital Honiara in 1999, 2000, and mid 2002, but with no further access to the Gold Ridge site. The project, which only commenced operation in June 1998, had closed at the height of the conflict on June 5th 2000.

The ethnic tension was between Guadalcanal people on whose island the project was located and the immigrant population from neighbouring island of Malaita, of which I am an ethnic member. The Gold Ridge project remains an important historical project for the Solomon Islands and thus the study retains it as a case study focus.

1.6 Data analysis and presentation

The data analysis and presentation of research findings has two components. The first component is that of theoretical analysis of articulation literature and also

presentations of some historical models of articulation in natural resource development relations. Chapter 2 provided this theoretical component. The second component of the study deals with mining projects in PNG and natural resource projects in Solomon Islands, including the Gold Ridge project. The focus on PNG and Solomon Islands experience relies heavily on previous works by other researchers showing forms and practices of articulation over resource use. Chapter 3 discusses the PNG mining cases and demonstrates the application of some of the forms of articulation models applied. Chapter 4 focuses on other natural resource development instances in Solomon Islands other than mineral. The following three chapters on the Gold Ridge Mining project case show how the relationship plays itself out and show that it was inevitable that the landowners should be disappointed. The conclusions in Chapter 8 outline the findings and implications for natural resource development in Solomon Islands and Melanesia at large. In other words, this entails conclusions about the articulation problem in Gold Ridge Mining project.

The Gold Ridge Mining Project case will be presented in three chapters. Chapter 5 provides a historical analysis of mining development in Solomon Islands. This uses mainly historical data from secondary sources as well as government documents. Chapters 6 and 7 focus on the process of Gold Ridge development to provide details of the how relations play themselves out in this particular case.

Chapter 2

The concept of articulation

2.1 Introduction

This chapter begins the argument of this thesis by outlining the origin and the use of the notion of articulation and how it will be used as a framework. As briefly outlined in Chapter 1, the roots of the notion of articulation are found in the philosophy of relational thinking. As will be described later in this chapter, the idea of articulating is about structure. In other words, it is about the way two or more things are joined together. This chapter will initially define the idea of articulation. From there it will go on to show its application in anthropology in general and how its elements are reflected in the ‘joining’ of kin groups in natural resource development. The concept of articulation is useful as a framework to explain forms of relationship between kin groups and natural resource development projects. However, the conclusion of this chapter is to argue that in the history of natural resource development in Melanesia, the dominant form of articulation is characterised as controlling and biased against kin groups. It also serves the interests of the state and operating company more than it does for kin groups. This form of articulation is defined as an instrumental form of articulation. But firstly, what is the idea of articulation itself?

2.2 The concept of articulation

This section traces the origin of the idea of articulation and outlines some of its applications in linguistics and anthropology. Particular emphasis is placed on Sahlins’ application to highlight the form of articulation relevant for this work.

2.2.1 Giambattista Vico’s articulation

The origin of the concept of articulation is associated with the early eighteenth century thinker, Giambattista Vico. In his study of mythology among the ‘primitive’ human he asserted that in fact these people, who were considered primitive, were in essence natural poets (Hawkes 1977: 12). According to this idea, human experience

allowed the mind to articulate the physical world to make it normal. Thus, mythology was the way the human mind structures the physical world to make sense of it for 'primitive' man. Thus, humans are generally structuralist. The important contribution of Vico was the recognition of the process of structuring. Jean Piaget suggested that structure could be observed in the way in which social entities are arranged because structures manifest wholeness, transformational and self-regulating features (Hawkes 1977: 16). These features were already discussed in Chapter 1. This realisation about humans as structuralist is a vital prerequisite for what was to follow in human thinking about the world around us. Since Vico, the concept of articulation crystallised in the twentieth century and was applied in various fields of learning, especially in linguistics and anthropology.

2.2.2 Ferdinand de Saussure's articulation

Since the time of Vico, Ferdinand de Saussure, a Swiss linguist, was one of the most important expounders of the realisation that humans were structuralist. It was from Saussure that most modern structuralists derive their heritage (Hawkes 1977: 19). This way of thinking was new in his time, when the conventional view was that the world consisted of independently existing objects. The independently existing objects were in turn observed and classified. In other words, social phenomena or entities exist as separate wholes within a diachronic or historical process. This could be observed and its laws of change could be recorded. Saussure rejected this view for a relational perspective (Hawkes 1977: 19). A relational perspective is an alternative approach to study social phenomena in terms of their individual parts (that is diachronically). The relational approach studies social phenomena in terms of the relationship between parts (Hawkes 1977: 20). This means synchronically, as opposed to diachronically, researching social entities.

The relevance of Saussure is that in his study of language, he was able to distinguish two fundamental dimensions of articulation. These are the synchronic and diachronic dimensions of the study of language. This distinction was important in that it recognised the importance of both the current structural properties of language (synchronic dimension) as much as its historical dimension (diachronic) (Hawkes 1977: 20).

Saussure argues that language as a social phenomenon has two dimensions. One dimension he called *langue* and the other dimension *parole* (Hawkes 1977: 20). The importance of this distinction was that *langue* was the abstract system of language and the *parole* was the individual utterances or speech. One analogy used to distinguish these two aspects of language was the game of chess. In chess, the rules exist beyond each individual game. The only time these rules acquire concrete form was in the relationship developed between each piece in individual games. Saussure argues that language also operates in the same way where the rules (*langue*) that govern the day to day speech (*parole*) exist beyond *parole*. In other words, *langue's* manifestation is dependent on *parole*. This is the important relationship between concept and practice.

In the field of linguistics, semiotic study applies Saussurian concepts to understand the application and the roles of diachronic and synchronic dimensions. In semiotics, the concept of articulation refers to the relations in the study of "signs". In this context, the idea of articulation referred to the structure of code (Chandler 1999: 1). According to Chandler, codes are conventions, which in text signs are organised into meaningful systems (Chandler 1999: 2). For semioticians, or those who study signs, codes provided a framework on which signs depend to make sense. For example, "words" in language are complete meaningful units or signs. Each sign such as a "word" consists of a "signifier" and a "signified", signifier being the "sign", for example a "word" and "signified" being what the "sign" or such "word" stands for. When a code occurs as a recurrent meaningful unit or the relations between the "signifier" and "signified" are meaningful, this is the first "articulation." (Chandler 1999: 2) In other words, a semiotic code as system achieved a level of first articulation when its smallest meaningful units are available. For example, a "word" as a complete meaningful unit is a complete sign and thus has a first articulation. To further demonstrate this form of relationship, Chandler suggests that, given a sign such as the word "tree", the signifier is the letters "t-r-e-e" and the signified concept is the category "tree". Thus, the meaning of the sign is meaningful through the relations of the sign (Chandler 1999: 2). Language therefore has two inherent dimensions in which meaning is created—namely syntagmatic relations and associative relations (Hawkes 1977: 26). Let us consider more closely these two dimensions of the idea of articulation.

2.2.3 Diachronic and synchronic dimensions.

Syntagmatic or diachronic relations, are a 'horizontal' form of relations. In language, this 'diachronic' aspect is characterised by being sequential in unravelling meaning. This meaningful relation is a first articulation. The major feature of syntagmatic relations is its commitment to the passage of time (Hawkes 1977: 27). For example, since language is an auditory system, the relationship between a "signifier" and "signified" unfolds during the passage of time. The relationship between "signifier" and "signified" is sequential.

In contrast to the diachronic aspects of language, there is also the synchronic aspect. This is the associative or 'vertical' relation. This form of relations identifies difference between signs or 'words'. Hawkes explains that each,

. word will have relationships with other words in the language that do not occur at this point in time, but are capable of doing so. The word, that is, has 'formulaic' associations with those other words from among which it has, so to speak, been chosen. This means these other words, part of the inner storehouse that makes up the language of each speaker (Hawkes 1977: 27).

What this means is that in any language we humans recognise meaning because of contrasts that exist between possible words. The fact that these other words are there, help creates meaning by not being chosen, thus defining the word. This is the associative aspect of language. This relationship of differentials between signs is a second articulation. This form of articulation or 'vertical articulation' is meaningful by difference. The important feature here is that it allows selection of, say, a sign from other alternative available signs.

Clearly, what we begin to see about the idea of structure in language is that it refers to meaningful relationship. In language, there are two forms of meaningful relationship. The first way to achieve meaningful relationship is through sequential relations or first articulation. That is the relationship between a 'signifier' and the 'signified'. The second meaningful relationship is through 'difference'. This form of relation is a

vertical relation. Actors recognise meaning by contrasting between, say, two possible signs or words. This form of relationship is a second articulation. In other words, meaning is created in language through the above two forms of articulation. Accordingly, linguists argue that the above two dimensions of language or forms of articulation are self-regulating in language. On this assumption, it is argued that if language is self-regulating in form then it follows that it provides researchers with the means to deal with other worlds beyond their own. In other words, diachronic and synchronic forms of articulation make up the human structure as our inherent characteristics (Hawkes 1977: 28). Language is also a feature of the structure of human reality. This means that these structural concepts are applicable to understanding the world around us.

However, while one could agree that in language meaning is created by both associative as well as sequential relations in signs, to create sense it requires an interpreter (Chandler 1999: 3). This process of interpretation is important because it allows for creating signification. This means, in other words, the role of the sign in social action. This will be discussed further in the next section in Sahlins' application of structural analysis. For now it is sufficient to say that the role of actors in the interpretation of signs is relevant.

2.3 Articulation in anthropology

Anthropologists borrowed from linguists, using structural analysis in the study of tribal societies. For the purpose of this work, there are two anthropological works cited to demonstrate the relevance of the concept of structure as an important framework for understanding social relations. The first is that of Radcliffe-Brown's functional model, and the second is Sahlins' structural anthropology. Both anthropologists attempted to understand structures of relations in kinship society, although which is applicable to other social situations.

2.3.1 Radcliffe-Brown's functional model

For Radcliffe-Brown, a social unit has basic needs that must be fulfilled if it is to survive. Therefore each part of the social unit functions in a way that maintains the unit as a whole (Radcliffe-Brown 1968:5). For Radcliffe-Brown structures assume

ordered arrangements of parts, just like the human body has structures of arrangements of organs, tissue and fluids. The organism also has life and that is a process. Thus,

.. Process is dependent on the structure and continuity of the structure is dependent on process (Radcliffe-Brown: 1968:13).

Fortes (1949:vi) referred to Radcliffe-Brown's functional model when he suggested that 'persisting culture is an integrated unit or system in which the elements have definite function to the whole' (Fortes, 1949:vi). Thus, the three main concepts in this structural analysis theory are process, structure, and function, as the means to explain both continuity in forms of social life and the processes of change in those forms. In other words, particular structures found in society, for example rules, roles, and values, serve a function. Structure exists because it has a role in meeting the need of the whole. In this sense, continuity or change in structure is explained in terms of function. For example, since anthropologists were studying kin group societies, such a model was used to explain kinship systems and behaviours of members of such systems. Kinship systems were structured and perpetuated through marriage and the subsequent reciprocal exchanges that were involved. Exchange relations in kinship-based society are elements performing the function of maintaining kinship structure. Thus, the behaviour of the members of such a society in terms of their attitude, actions, and interactions have a mutual interdependent relationship with the structure of kinship. Scott suggested that the existence of the elements, or the process of such structure is explainable in terms of the function they perform in the maintenance of the structure (Scott 1992: 54).

The important dimension about structure, as alluded to by the functional model is self-perpetuation, the idea is that elements of a structure function for the persistence of that particular whole. Thus, change and continuity are the functions that processes play in the maintenance of structure.

What is important here is that structure and process are mutually related. In other words, kinship systems are dependent on the behaviour of actors as much as the actors' behaviour depends on the kinship system. As social actors, according to this functional model, an actor's behaviour reproduces the structure and hence such

structure persists in society. Functionalists therefore argued that such interdependence of structure and process is self-reinforcing because the process serves a function, which is the continuity of the structure. This self-maintenance of a social system is therefore a reproductive process.

The reproductive process is an important factor in the continuity of the social system. In the context of a kinship-based society that exists in isolation, functional explanations are quite useful and enlightening. However, how does social reproduction take place in a situation of cross-cultural interaction? This brings us back to the idea of articulation as a kind of 'joining' between two or more actors. In a situation of cross-cultural contact, the relationship between the encountering social systems undergoes a state of flux. Sahlins' work is useful in this context in showing how the social system transforms and reproduces the new structures of the transformed social system (Sahlins 1981: 67).

2.3.2 Sahlins' structuralist model

Sahlins has explored structure, process, functions and reproduction in a situation of cross-cultural contact, and found that in such a situation a social system may not reproduce itself, but instead be transformed (Sahlins 1981: 67). In explaining cross-cultural contact in Hawaii, Sahlins tried to explain that people act upon circumstances as a result of their own cultural presuppositions, that is, the socially prescribed categories of persons and things that influence human actions. In some sense, the world exists to people in the way they socially construct it. This means that each person or groups of people, do not necessarily share the same worldview. Hence, according to Sahlins (1981:67), human actions do not necessarily conform to particular categories of perception of the world. Where people encounter new categories of perception and decide not to comply, they in turn revalue and functionally redefine such perceptions.

Simply, this means a given society or culture, when it receives a new category in its cultural system, as it has existed and where its own interests have been affected, will itself change. Thus, according to Sahlins, what started as a reproduction of the system then becomes in effect a transformation of that system. According to this view, all structural transformation in any social system involves structural reproduction.

Sahlins suggests that in a situation of cultural contact, effects such as transformation and reproduction are distinguishable. At the same time, the processes that are involved in these effects are not necessarily restricted to a situation of cultural contact alone (Sahlins 1981: 68). In situations of cultural contact, a process of clash of cultural understandings and interests occurs within which both change and resistance to change are in effect historic issues. The result is that people criticise each other in such a new situation. This is because they interpret the same events differently. Again here, we see the relevance of interpretation, as mentioned earlier, in creating meaning. This allows us to get a sense of cultural relativity of the events and the responses to it. This process is not restricted to contacts of totally different societies alone, but does also occur within each society itself, as long as the actors have some distinct concepts and interact with each other and the world. In other words, different actors in the world see events differently.

Apart from people's criticism of each other, Sahlins explains that there is also the role of the 'sign' in action (Sahlins 1981: 68). This is due to different interpretations of events, what Chandler referred to as the process of interpretation (1999: 3). The sign here is used in the same way as codes are used in semiotics, where "signifier" is the sign and the "signified" is what the sign stands for. In applying this idea, Sahlins suggests that action is intentional, which means actors act with purpose and in line with their social lives in the world. Thus actors, in living their lives, use signs or codes in carrying out actions. Codes are brought into referential relations to the objects of their actions (signified) and thus create 'contextual meanings' for the 'conceptual values'. Clearly, as human actors, we use signs to carry out actions towards attaining certain goals.

Sahlins' notion of 'conceptual values' and 'contextual meanings' implies the notions of 'associative relations' and 'sequential relations' respectively. Sahlins pointed out that the distinction drawn between 'contextual meaning' and 'conceptual values' is due to the codes people enact and the purpose of such action. It is the fact that signs are different which allows actors to distinguish a sign from other signs, in the collective symbolic scheme. This is the conceptual value of sign or the associative relations of signs. However, sign or code can also represent a 'differential interests' to various subjects according to the position of such 'signs' in their general lives. This is

the contextual meanings or sequential relations or articulation. For Sahlins, "interests" and "sense" (or "meaning") are two sides of the same coin (1981: 69), where 'interests' relate to persons and 'sense' relates to other signs. In other words, there is the difference between actors enacting signs and signs existing or constituted in society. Though signs have multiple meanings as 'conceptual value', actors in practice make selections of the meaning they make. Thus, signs could be instrumentally rearranged in human action. Since human action takes place through time, the value of a sign enacted takes an instrumental value for the subject (Sahlins 1981: 71).

The arranging and rearranging of signs in creating an instrumental relation in human actions is due to the characteristics of the sign itself. Signs have the characteristic that Lacau called "floating" signifiers (Kuo 1999:2). Lacau's conception is important in pointing out that social reality is constructed. Lacau argues that these signifiers are characters that are not fixed. The signifiers are in fact "floating signifiers". For example, the term "Democracy" is a signifier, but like other signifiers is a "floating signifier". In other words, the signifier's meaning is subject to ambiguity. Thus, society is the result of discourse or forms of argument upon which people construct their own identity. The fact that signs are "floating" means actors can rearrange them, thus creating new meanings for such signs or their semantic value (Sahlins 1981: 68).

In summary, Sahlins concluded that,

...The dialectics of history, then, are structural throughout. Powered by disconformities between conventional values and intentional values, between inter-subjective meanings and subjective interests, between symbolic sense and symbolic reference, the historical process unfolds as a continuous and reciprocal movement between the practice of the structure and the structure of the practice (Sahlins 1981:72).

Clearly, the important contribution from Sahlins' work is the emphasis on the role of 'signs' in human action. Actors select signs in relation to their goals to give them 'sense' and 'interests'. Thus, 'sense' and 'interests' are forms of relations or articulations in human action. The creation of instrumental relations is therefore the result of actors making selections of signs and giving them conceptual values and contextual

meanings. Clearly, instrumental relations or articulations are important notions for understanding social relations.

Understanding the problem of relationships between kin groups and external interventionists requires understanding the elements of articulation. The concept of articulation helps us understand the position of each subject involved in the relationship. Articulation also helps to explain that in a cross-cultural interaction a number of processes take place. Initially, in a given social system, subjects structurally transform when a new category of perception is introduced and where such transformation affects the subject's interests. Secondly, it follows that in any such structural transformation, there is structural reproduction. Thus, change and reproduction of social systems are important elements of articulation. The third important element of articulation is that actors re-arrange 'signs' by revaluation, and functionally redefine categories of perception. These elements of the notion of articulation help us to apply it to situations of landowners and mine relations, which is the core subject of this research.

2.3.3 Torfing's hegemonic articulation

The articulation concept, in the context of international relations, involves inter-state actors in the world stage. However, like any individual actor, states too have their own interests in relationships they form at this level. For example, inter-state relations are not always reciprocal, and instead the interests of one state may be served more than that of the corresponding state. This form of relationship is a hegemonic articulation.

According to Torfing, where the instrumental value of one state subordinates other instrumental values of other subjects there is a hegemonic relationship (Torfing 1999: 101). Torfing (1999: 101) suggests that where a form of articulation favours a privileged position of a subject, say a nation-state, it also favours the social construction of such a relationship. Thus, the two important elements of a structure of relations are the position of a subject, and the nature of the processes that construct the positions in that existing relationship. Hence, at the level of social relations, it is

the structures and the processes that construct relationships that are the important influential factors that determine the nature of outcomes in that relationship.

By tracing the origin and the applications of the concept of articulation several relevant features have emerged. Since the time of Vico and Saussure, the concept of articulation is clearly a relational concept. Saussure's study of language finds that meaning is created as a result of two forms of relationship. The diachronic relation is the sequential relationship between a 'signifier' and the 'signified'. This is a first articulation or a complete meaningful relationship. The second form of relationship that Saussure identifies is that of a synchronic form of relationship in language. This form of relationship is vertical in that meaning is created as a result of difference. The fact that signs are distinguishable from other possible signs also creates meaning for an actor by virtue of difference. In short, the structure of codes could either be meaningful or not meaningful. Similarly, in a social system the relationship between its elements could either be meaningful or not meaningful. Equally for Radcliffe-Brown, a social system is a functioning whole with elements that function to maintain the system. As in a kinship system, elements such as social exchange rituals serve the purpose of maintaining the structure of kinship systems. In other words, social systems are self-regulating where the structure of a social system is mutually independent of the processes that function to serve the whole. Thus, in a social system the nature of relationship between the parts is functional if it is self-regulating and if it is able to reproduce itself.

However, a social system may be meaningful to actors and may also regulate itself through reproduction but, as Sahlins showed in the context of cross-cultural contact, social transformations occur and structural reproduction takes place. The social constructions that follow depend on actors acting out signs that reflect their goals or preferences in life. Thus, new forms of social relationship are formed as a result of revaluation and redefinition of new social categories. It is in this process of revaluation and redefinition that norms, values, and roles are redefined. The revaluation and redefinition also takes place at the level of processes in terms of forms of actions, interactions and attitude towards goals in the scheme of things. Thus, the role of signs in human action is relevant as a basis for explaining why certain signs are preferred over other possible signs.

While features of structures such as wholeness, transformation, and self regulation are important, it is equally important to recognise the role of signs in human actions. Hence, in a given social situation, the structure of relations depends largely on whose social construct dominates the form of relationship currently at stake. Some social positions have more significance than others and over time may be reproduced or even transformed. Where social transformation occurs, it is also expected that a structural reproduction may also occur. In the final analysis, a form of relations that allows the instrumental value of one subject to take precedence over another subject is an instrumental articulation. An instrumental articulation is then a form of structure that privileged one subject or more over and above the position of other subject or subjects involved in a given situation.

2.5 Natural resource use models of articulation

Historically, a form of instrumental articulation has been predominant in Melanesia. This is particularly the case in the context of kin groups and their relationship over natural resources use in PNG and Solomon Islands. The examination of the historical experiences in PNG and Solomon Islands reveals that there are varying models of instrumental articulation. These include the Discovery, Ratification, Development Forum, and Sustainable models. In varying degrees, they all have the features of control and subordination of kin groups' roles in natural resource use. These models are forms of instrumental articulation that are used to join kin groups in the context of natural resources development.

2.5.1 Discovery model

Prior to the arrival of European explorers, traders, missionaries, gold seekers, and planters, most groups in Melanesia lived within the framework of social groups. Such social groups have distinct languages and varied ways of social organisation. In Solomon Islands, the present 61 cultural groups not only inherited much of their distinct cultural forms from pre-colonial times but also preserve the diversity that existed then. In PNG, the number of social groups is much more substantial and complex. There are at least 800 ethnic groups in PNG. This diversity of cultures and social groups are often referred to as “chaotic” or “acephalous” societies. Missionaries saw this as a reason to proselytise, while others saw it as the reason for introduction of

a new "Social Order". This attitude is what Burton has described in the context of PNG experience as the "discovery model" (Burton 1997: 28).

The discovery model is a form of relationship recognised between coloniser, on one hand, and the colonised people on the other. The argument about the 'discovery' model is that it is a way of thinking about the environment and other people in that environment. The Discovery Paradigm or model has specific features, according to Burton (1997: 28). These are the ideas of discovery and Terra Nugas.

The first idea is that of discovery (Burton 1997: 28). Burton saw this idea of 'discovery' in the recurrent representation of the landowners in Papua New Guinea as isolated. For example, this attitude is manifested in the representation of the Wopkaimin people as 'isolated', and 'being discovered'. In addition, the discovery attitude is shown by the repetition of the gold seekers' conquest of the trackless wilderness. Burton argues that this attitude of discovery promoted gold seekers' interests and remained unchallenged in the 1960 and 1970s (Burton 1997:28). Thus the gold seekers represent themselves as 'cultural heroes' who went through a hostile environment to achieve their goal. The locals, those who called such an area home, on the other hand, were left out of the equation of representation. For Burton, the use of words like 'remote', 'conquest' and 'trackless wilderness' misrepresent the area and is a feature of this 'discovery paradigm'. Another example is the discussion of the introduction of technology into an area, to create wealth, as being directly linked to progress for the surrounding area. The negative implication of this attitude was the misrepresentation of the existing human uses of the land designated under an exploration license 'as having no use or lacking usefulness' in purpose for those living in the area. The reason for this misrepresentation was, according to Burton, the setting of existing human uses in contrast to western industrialisation (1997: 29).

Burton argues that the concept of Terra Nugas was central to this discovery paradigm. Terra Nugas was a corollary of the idea of exploration in areas considered remote from civilisation. The Ok Tedi area would in this instance be considered remote. Nugas means "worthless, trifling of no consequence", implying land was seen as such and therefore was best utilised for industrial use through mineral resource extraction (Woolford 1976: 29). This attitude would have significant implications for the state

and the mining company's attitude to the compliance with social and physical environmental standards. The remnants of the Terra Nugas mentality persisted after PNG's independence. This refers to the Papuan 1908 Mining Ordinance, which stipulated that Crown land included all native lands. The implication here is that despite the fact that such ordinances may be obsolete, elements of discovery model remains. Burton cites the example of Ok Tedi's Kiuga-Tabubil road corridor. The land was considered Crown land and therefore any compensation for economic distress was excluded, as it was seen in the context of Nugas (Burton 1997: 30). In addition, Burton argues that it is not only the effect of Terra Nugas which devalues existing resources such as gardens, forests, and game animals that is of concern, but also the fact that the post colonial state also perceives land in the same way.

The discovery model of relationship outlined by Burton raises a number of important issues. The first is the perception of landowners as being 'isolated' and thus justifying their 'inclusion' through mineral resource exploitation. This isolation is an 'outsider' perspective that takes limited account of the existing inhabitants' views. The second issue arising through this model is that the attitude of Terra Nugas is a constricting factor on the rights of the landowners. The related issue is that such perception undermines both government and the mining company's responsibility for compliance to social and environmental expectations (Burton 1997: 30). The relevance here is that this form of attitude supports instrumental articulation of kin groups in natural resource development by sustaining beliefs of the state and company rights to intervention in kin group territory. The roots of discovery paradigm can be located in the history of colonisation. For example, the attitude of the Dutch to declare the area west of the 141 degrees east on the Island of New Guinea as their territory in 1828 without the consent of the people concerned, is another example of the discovery model (Woolford 1976: 2).

Features of the discovery model can also be seen in the Fiji experience during early mining development. The imposed state policies were expropriative (Emberson-Bain 1994: 24). Emberson-Bain argues that during the development phase of Emperor gold in Vatukoula, kinship group families were removed, along with their associated rights to the land. This was done as a result of the declaration of indigenous Fijian villagers living in the area as illegal in the 1930s (Emberson-Bain 1994: 25). This practice was

legitimised through previous legal instruments, such as the 1908 Mining Ordinance that was used to circumvent the rights of indigenous people in Fiji (Emberson-Bain 1994: 26). For Emberson-Bain, within the Pacific region such policies have been maintained after independence, and have effectively shaped the attitude, mineral resources ownership rights, policies, and subsequent legislative frameworks (Emberson-Bain 1994).

In Solomon Islands, this discovery model is reflected in the land reform process that took place following its declaration as a Protectorate in 1893. During the colonial period, the land laws passed had the greatest impact. This was especially so when the islands were declared a protectorate of Great Britain. The British declared the Solomon Islands a Protectorate of the British Empire in 1893, and posted a Resident Commissioner in 1896 (Allan 1957: 36). The first Resident Commissioner, Charles Woodford, chose Tulagi, among the Central Islands between Guadalcanal and Malaita, for residency, and pursued a policy of commercial development in the Solomon Islands (Naitoro 1993: 56). This led to a large-scale alienation of customary land for imperial investment. The first major company created was the Pacific Islands Company, which obtained all its concessions through its strong connections with the Colonial Office (Naitoro 1993: 56). These land concessions were sold in 1906 to Levers' Pacific Plantations, which was a company formed by the soap manufacturer, Sir William Levers, to supply raw material for his factories. The demand for commercial expansion enabled the colonial administration to introduce regulation for land "confiscation" through the Queen's Regulation No.4 of 1896. Native Land was defined as 'land owned by a native'. Section 10 of the Regulation mentions vacant land, being defined as "being vacant by reason of the extinction of the original native owners and their descendants" (Allan 1957; Naitoro 1993). This legal process of land "acquisition" continued in later years. The Queen's Regulation No. 3 of 1900 amended by No.1 of 1901 and by No. 2 of 1904, continued to lay down the idea of "waste" land defined as "land which is not owned, cultivated or occupied by any native or non-native person" (Allan 1957: 37). The colonial administration secured customary land for plantation capital and Church buildings and properties under this legal framework. This land reform had significant implications for the present conflict in Solomon Islands.

In 1906, Levers Pacific Plantation Limited was in control of most fertile land in the country, 200,000 acres in all (Lasaqa 1972: 33). In 1956, 90% of the coastal fertile land was appropriated under foreign control. This land reform had affected only about 6% of total land in the country (Allan 1957: 60). The Second World War put a brake on many of the plantation activities. But by this time, much of the fertile land had already been appropriated for plantation activities. The island of Guadalcanal was heavily affected. Between 1886 and 1920, the colonial government and traders were in possession of 22,720 acres of land on the plains of Guadalcanal (Lasaqa 1972: 34). This is the most fertile area in the whole of the Solomon Islands. For example, T.G. Kelly of Sydney acquired all the land between Mata Nikau and Tenaru rivers (20,444 acres in total) with trade goods (Lasaqa 1972). This practice continued until the Second World War.

The effects of the discovery attitude towards kin groups in PNG and Solomon Islands was very much the same. It created a sense of resistance and distrust towards the state and company. In the case of colonial land laws in Solomon Islands, it led to cultural resistance. In particular, after World War II, natives realised they had been cheated through the land acquisitions (Lasaqa 1972), which became instrumental in the resentment against traders and eventually the colonial government. This resentment took different forms starting from the realisation that there was an inherent inequality between Whites and Blacks. Such a perception of inequality, and especially in the context of natural resource use, was an important contributing factor towards attempts at reform through resistance to the state. In the case of the Solomon Islands, this was expressed through the Maasina Ruru movement in the post Second World war period. The change in attitude in Europe itself after the First and the Second World Wars were important in creating the environment for the process of decolonisation that followed. This was an awareness of the need for self-determination. This led to modifications in the attitude towards kinship groups and was reflected in the expectations of political independence. In the context of natural resource use, this meant a modification in the form of relationship governing resource use. This change of attitude, or a modified form of instrumental articulation, is reflected in early post war natural resource projects. This was the idea of ratification in natural resource development projects.

2.5.2 Ratification model

To ratify something is to make it legally valid (Merriam-Webster 1989: 455). It is a form of formalising relations or agreements. But it is the context of ratification that is of interest because formalisation of natural resource project agreements implies isolation. Ratification is therefore more than just an agreement in the situation of natural resource development projects, because in practice it also legally isolates such projects from other legal demands in that territory or the state. For example, where ratification is put in place, many conditional clauses that protect the project from any change can also be included, for example increases in taxation or royalties, or demands for review arising from nearby communities. In the case of the Gold Ridge Mining Project, one of the early strategies of the Ross Mining NL in the negotiation process was their demand for ratification. The government refused to accept this proposal because of the legal implications of isolating the project from the normal legal changes enacted by the state from time to time. It is from this perspective that ratification is seen as a form of instrumental articulation.

The ratification model as applied to the Bougainville Mine was restrictive. In terms of landowners, it was restricted only to those landowners 'directly' affected by the mine construction and its associated facilities. Ogan observed that compensation was one Australian Pound per acre per year (Ogan 1999: 5). Compensation for other property was left to the Mining Warden Court. In terms of political representation, there was no Nasioi in the House of Assembly, although there was one Bougainvillean (Ogan 1999: 5). The formula involved in the payment of royalties was not clear to the Nasioi. As they found out later, the value of 5% royalty meant a 5% of the government's royalty of 1.25%. Ogan expressed this in terms of 6 cents per A\$100 for the value of the minerals taken from their land. The mining agreement was ratified in August 1967 (Ogan 1999: 5).

The project development began in 1968 and continues until its commercial operation in 1972. The effect of this process of development and operation on the Nasioi was substantial. Ogan (1999: 5) observed that at the time the total population of Bougainville would have been about 80,000, with the Nasioi making only 14,000

people. The mining development brought some 10,000 construction workers from all over the world, including mainland PNG. This new invasion was associated with significant social problems such as drunkenness, violence and prostitution. There was loss of land for mine facilities and villages were relocated. The project was seen as oppressive (Ogan 1999: 6). There were also irreversible environmental damages, such as to the entire Jaba/Kawerong river system. Yet in 1974, when the original mining agreement was renegotiated to increase revenue for the emerging independent the state of PNG, the Nasioi did not receive any additional revenue for the price they paid in terms of social and environmental damage. The company (BCL), however, realised that it had to deal with the landowners more directly, and some new forms of compensation arrangement to benefit landowners indirectly were developed. But divisions among the Nasioi were also beginning to emerge among the generations affected by the mine.

In summary, the Bougainville case is a characteristic form of relationship between landowners and mineral developers. The project was operated on the basis of a ratification that the Nasioi had little to do with in terms of its definitions and objectives. In hindsight, if there were to be any lessons to be learned from the Bougainville experience, then according to a commentary by Professor Donald Denoon, it is important for:

- the state to identify and deal directly with landowners
- the landowners to benefit equally or more than the state
- the rules that govern resource development to take into account meanings of those directly dependent on the area designated for exploitation (Denoon 2000: 1)

The Bougainville crisis that terminated the project in 1989 was a genuine reason to consider other options for dealing with natural resource development issues. The crisis forced governments and mining project interest groups to see that kinship groups have enough influence to stop the project altogether if their concerns are ignored. For the purpose of this work, ratification of the Bougainville mining project is a modified form of the discovery paradigm. Ratification remains an instrumental form of articulation because of its isolating features. It was out of the context of the

Bougainville crisis in PNG, which led to a new phase of relationship development known as the 'Development Forum'.

2.5.3 Development forum model

Filer described the 'Development Forum' as a policy instrument devised by the PNG government during the process of development of Porgera (Filer 1995: 67). The 'Development Forum' was in effect a process of tripartite consultations between the central government, provincial government and the landowners. According to Filer, the relevance of the 'Development Forum' was to secure landowner's endorsement of the government's mining development conditions and also obligate each of the three 'stakeholders' through a set of agreements (Filer 1995: 68). It was through this set of agreements that the distributions of costs, rights, benefits and obligations were defined.

In PNG, the Lihir project was the first to be processed and approved under the Mining Act of 1992. The supporters of the Development Forum had, by this time, the advantage of learning from Porgera and other mining experiences. Consultations between landowners and the officials of provincial and central governments were held in advance, well before the official Development Forum. In Lihir, representation of the people was made up of two groups: first, the Lihir Mining Area landowners Association who were directly affected by the project; and second, the Nimamar Development Authority, the local level government on the Island (Hancock & Omundsen 1998: 6). The creation of a Development Forum has been welcomed in Papua New Guinea as a success. The forum was also used for two other major projects, namely the Kutubu and Gobe Oil projects.

Despite the low level of conflict in the Porgera and Lihir projects as a result of the Development Forum process, Filer noted in the social impact mitigation report for Lihir, that there remained some concerns regarding the indecisiveness of the landowning community and the provincial government in relation to various policy issues (Filer 1992: 37). Filer also noted that gauging local opinion was difficult in a local situation and that the problem of securing maximum participation of landowners concerned with their belief that natural resources, in this case mineral resources, had been stolen from them by the state and developers (Filer 1992: 37). In other words,

landowners' reluctance to participate fully in the project related to their distrust of both the state and the mining company. Lihir will be discussed in detail later in Chapter 3, but for now it suffices to say that even with the Development Forum, the state ownership of mineral resources has not changed. While it can be argued that the Development Forum is an improvement in the process of establishing relations with kin groups, the existing mineral policy remains structurally intact. The development Forum is therefore a more sophisticated form of instrumental articulation that conceals the state controls of natural resources against the consent of kin groups.

2.5.4 Sustainable model

The latest in the search for a meaningful relationship between important stakeholders in mining development projects is the idea of a sustainable model. This form of relationship has come to be known as the Triad model. The Triad model has been applied in studies involving governance and resource development relations. Banks applied this model in the study of the Porgera mining project in PNG (Banks 1995: 38).

This framework argues that each of the players (the state, community and corporation) is not discrete, consistent, coherent or homogenous (Banks 1995: 38). In unravelling each of the layers of these entities, diversity and complexity are revealed. The argument of this model is that the characteristics of these players shape the nature of relationships between these players. One of the conclusions of Banks' argument is the important role of the state in ensuring the security of relationships in resource development in Melanesia (Banks, 1995: 330). Clearly, the role of the state is an important factor influencing the nature of the relationship of resource development in Melanesia. The characteristics of each stakeholder shape the nature of the relationship and the role of the state in mediating is significant. Yet, this model requires the state to take a neutral role, which is not possible where the state itself is a stakeholder with its own interests.

In a paper presented at a conference in Madang in 1998, Chris Ballard argued that there need not be a fixed set of roles for each of the partners in a mining relationship. However, social sustainability could be achieved adopting general principles and practical measures (Ballard 1998: 5). This refers to principles of engagements, which

include participation, flexibility, and transparency. Ballard argues that the key lies in a clear commitment by each partner to identifying the expected outcomes for each stage of the mining project (Ballard 1998: 5). In his observation of mineral development relations over the last fifteen years, the three-way "mining relationship" was seen as complex and challenging (Ballard 1998: 329). Ballard observed that during the periods of 1960s and 1970s, communities were left out of consultation, as in the cases of Soroako or Ertsberg in Indonesia or Panguna in Bougainville. In the 1980s and 1990s, relative inclusion of the community with the state and company was forced. Ballard argued that such change has resulted, not due to the state's initiative, but due to circumstance and challenges by the community to the legitimacy of the state (Ballard 1998: 329). An important outcome of such a change was that the increasing role of the state was achieved at its own expense. For example, a trend in PNG was the increasing redistribution of benefits from the state to the mining communities (Filer 1997a.). This occurs where there is increasing competition between the state and the community in each successive project. In addition as the community claimed more rights, other stakeholders emerged. This included NGOs, lawyers, entrepreneurs, and even academics. Thus the idea of stakeholder has also increased in definition (Kirsch 1996). According to Ballard, these developments resulted in communities becoming quite sophisticated, increasingly aware of their rights under national and international law, and willing to challenge the sovereign claim of the state and authority of the company (Ballard 1998: 2). The case of the Ok Tedi environmental litigation against the BHP mining company was an example.

Clearly what supporters of the sustainable model have shown is that relationships can be improved if the mediating role of the state is bettered (Banks 1995). In other words, the state's role was to mediate relations between the company and the communities, promote respect, support justifiable entitlements, consensus and information dissemination (Ballard 1998: 329 & Garnaut 1995: 65). The relationship could be made more sustainable if there are genuine commitments to ideals such as participation, flexibility and transparency (Ballard 1998: 5). The community should play an important role as it represents real people (Filer 1996: 66). The price the community paid in the mining initiative involves loss of land, livelihoods and cultural identity (Ballard 1998: 329). There is also the effect of the assimilation of the relocated community into the surrounding wider community (O'Faircheallaigh 1991).

However, this acknowledgment of the contribution of community has not so far been readily accepted and is a real issue for further improvement.

While sustainable models for the mineral resources development relationship described above are essential, and there should be an improved role of the state, so far the current emphasis is placed on processes of engagements rather than the structures that govern those processes. What is argued at the start of this chapter is that despite improvements in processes of relating over natural resource use, the structures that govern these processes make kin groups remain vulnerable. The norms, the roles, and the values that dictate relationships with kin groups remain instrumentally biased against them.

2.6 Implications for study of relations (evaluation)

The idea of instrumental articulation is about a type of relationship that structurally favours one subject over another in a given situation. At the start of this chapter, the meaning of articulation is defined. Features of articulation such as vertical and horizontal forms of articulation are outlined to show how human actors create and interpret meanings. The work of Saussure and earlier Structuralists suggest that structures change and self-regulate in social life. Sahlins' work shows that signs take on different meanings and roles for different actors because actors make choices over other possible alternatives. In a situation of cross-cultural contact, new social categories enter a new cultural environment and lead to cultural transformation. In the context of natural resource development in Melanesia, this cultural transformation has occurred and resulted in a structural reproduction of roles, norms, and values that instrumentally serves the interests of the state and developers more than kin groups. It is this form of relationship that is defined as instrumental articulation.

The relevance of the concept of articulation for this study is the ability to apply it to understand the nature of the relationship between kin groups and natural resource development projects, and why such relationships sustained the perception of the marginalisation of kin groups in PNG and Solomon Islands. The concept of articulation enables us to recognise that there are two dimensions of articulation. These are the diachronic and synchronic dimensions of articulation. These forms of

articulation are also self-regulating. Actors in society behave according to certain prescribed conventions and in so doing create meaning. The role of signs becomes important because actors act out signs that are meaningful and have particular interests for their goals in life.

Since Western contact with kin groups in PNG and Solomon Islands, there were forms of relationships between the colonial power and the colonised. The assumption guiding this research is that the relationship between kin groups and actors involved in natural resource development has taken a particular form. This is a form that reflects the significance of the project developments rather than the kin groups' interests. This form has persisted well after independence. In other words, the past forms of relationships were social constructs that reproduced certain forms of relationship that were instrumentally eschewed towards the state and the natural resource projects.

2.6.1 Research questions

The assumption of this research is that there exists an instrumental form of articulation of kin groups in natural resource development in Solomon Islands and PNG. By using the literature that defines the notion of articulation, the instrumental form of articulation is identifiable in all of the natural resource development projects selected for this study. Indications for the existence of this form of relationship should be evident in:

- *kin group attitudes towards projects, in terms of being more disputant*
- *actual instrumental articulation to support the claims in terms of norms, roles, values, actions, interactions and attitudes of actors in the project*
- *kinship groups with lowest instrumental articulation are expected to be least disputant, and those who are perceived to be instrumentally articulated are expected to be the most disputant*

These sources of evidence should show that there is indeed a problem with the articulation of relations between kinship-based communities, the state, and transnational corporations.

Chapter 3

Kin groups and mines: PNG cases

3.1 Introduction

This chapter describes natural resource development relations in Papua New Guinea (PNG). It examines the nature of the relationships between kin groups and external institutions and agents in PNG. It attempts to trace not only the form of relationships prevalent over natural resources in time, but also the origins and implications for the PNG development context.

PNG was previously a colony, until it gained political independence from Australia in 1975. The post-colonial PNG state, like its neighbouring Pacific Island nations, emerged into nation status politically, but with little economic foundation. The thinking at the time was that nation-building was the key, because a new nation was just like a 'child'. Through time and with the appropriate inputs the 'child' will grow into an adult. Nation-building was expected to follow the same sequence as human growth. It was to be based on the exploitation of natural resources for the development of the newly emerged nation. In PNG, the presence of vast natural resources such as forests, fisheries, and minerals, gave the impression that exploitation of these resources was the formula for nation-building success. The PNG mining industry remains the largest in the Pacific Island countries and currently operates some of the largest gold-mining projects in the world. Some of these gold-mining projects are considered in this chapter.

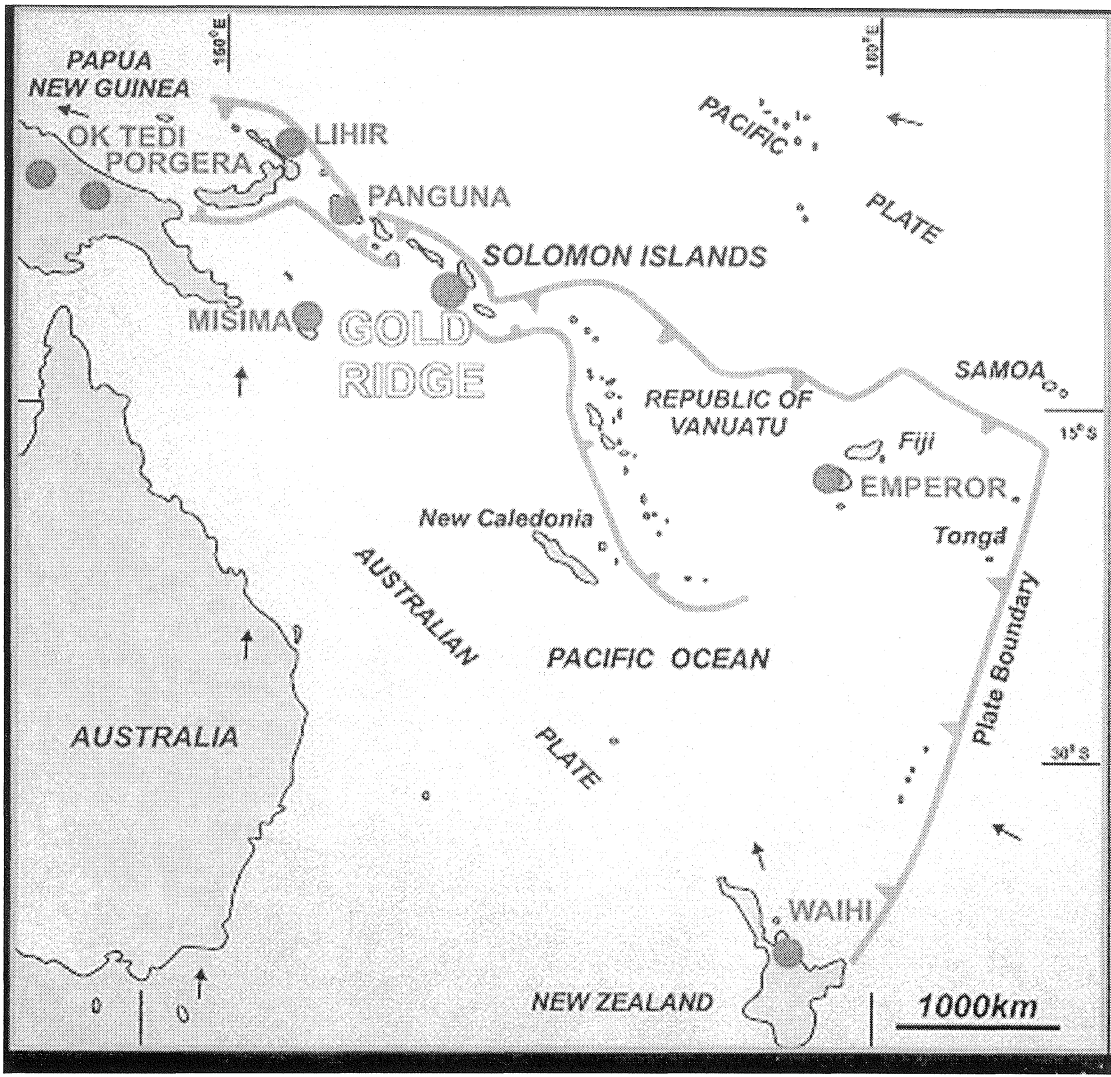


FIGURE 4: Map: showing major mining locations in PNG in the context of the Pacific 'rim of fire' (Source: Ross Mining NL)

John Connell commented on mining development in the Australasian region, that, despite injections of mining capital and infrastructure resources in previously isolated areas, indigenous goals have so far not successfully linked to those of the mining developers (Connell 1991: 1).

This thesis takes such observations as a starting point for its argument. The line of argument followed here is that most of the improvement in relationship between kin groups and mines in PNG are process improvements rather than structural. In other words, much of the improvement was an evolutionary improvement in the processes applied in interactions with kin groups for natural resource development. But the

same cannot be said of the normative structures that govern such processes. While there were improvements in the interactions with kin groups for achieving development goals, normative structures remained because they serve particular interests. In essence, these normative structures expressed through existing rules, roles, and values, persist over time because they serve preferential interests of certain actors in the relationships surrounding natural resource exploitation. The persistent failure of the newly emerged state of PNG in meeting kin group goals is strongly related to the permanence of a particular form of relationship that is defined as the instrumental articulation of kin groups.

In order to demonstrate this argument, the chapter is divided into three major sections. The first section describes the historical context of instrumental articulation. The second section outlines four major natural resource development projects in the mining sector in PNG to show the extent of instrumental articulation characteristic of each project. The third section outlines the implications of instrumental articulation for PNG and the lessons that should have been learned in the development of the Gold Ridge project in Solomon Islands.

3.2 Context of instrumental articulation

Instrumental articulation, in simple terms, is about a certain way of doing things between different actors. It is a method of social practice in which certain subjects impose certain forms and practices of relationship on other actors for the purposes of carrying out operations to meet their goals. This section outlines forms, practices, and origins of forms of instrumental articulation of kin groups in PNG since contact with the West.

3.2.1 Social organisation in PNG

PNG had prior complex forms of social organisation based on kinship before the arrival of Europeans. Kin groups in PNG were isolated for thousands of years before the contact with the outside world. Archaeological studies have dated the first

settlement of the major islands about 40 000 years ago, as in the case of the Huon Peninsula in the Morobe province (Filer and Sekhran 1998: 25). The long periods of cultural isolation allowed the Melanesians in PNG to develop their own cultural and social systems. The complexity of social systems in PNG is also the result of cultural interactions in the past. In particular with reference to the Austronesian population migration away from South East Asia to PNG and the Pacific. This Austronesian migration made contacts with a non-Austronesian population or Papuans with distinctively different cultures. This allowed forms of diversity specific to Melanesians. Today, the state of Papua New Guinea occupies the eastern half of the Island of New Guinea, with the other half as West Papua later to be named as Irian Jaya when annexed by Indonesia. The state of PNG also includes other islands, entailing some 600 islands in all with a land area of 464,000 square kilometres. There are at least 800 language-based groups in Papua New Guinea (Garap 2000: 162). These include some 1000 ethnic groups totalling a population of at least 4.3 million people (Dorney 1999: 18). Most community groups in PNG are largely kin-based.

Although there are variations, kinship-based relations are largely a dominant feature of PNG society. Anthropological studies of the highlands characterised these forms of social relations as 'bigmen' practices. The idea entailed establishing hierarchical relations through reciprocal relations (Godelier 1977, Gregory 1982, Josephides 1985, Modjeska 1982, Strathern 1982). Reciprocity was the main feature of kin group relations in social, political and economic terms. In PNG, understanding reciprocal relations was vital. This was because of its implications for the way in which communities perceive relations and the expectations of such relationships. Researchers in PNG have defined reciprocal relations as a condition of inalienability of wealth and persons from the relations that made them (Mauss 1990, Strathern 1988, Weiner 1992).

According to Strathern, there is a major difference between capitalist exploitation and relations of reciprocal exchange (Strathern 1988:162). In the latter there is no alienation of persons from each other, or from the products of their labour, while in the former, exchange controls relations of productions. In this sense, control of the relations of production resembles instrumental articulation (Strathern 1988: 162).

Anthropologists argue that one way reciprocal relations are maintained, and alienation of members restricted, is through the practice of consumption, both symbolic and physical (Sykes 1999: 161). An example is the practice of mortuary feasts known as Malaggan in New Ireland (Sykes 1999). A similar mortuary feast system, known as Segaiaya, is practised in Trobriands (Sykes 1999). A kinship system of reciprocal relations shaped by the notions of “honour” and “shame” broke down following European contact. Strathern suggests capitalist exploitation was different from relations of reciprocal exchange because in the former there was control over relations of production (Strathern 1988: 162). The various forms of control exercise over relations of production sharply contradicted reciprocal exchange systems in PNG. While reciprocal exchange was the form of articulation and practice in the PNG cultural context, colonisation partially transformed this form of traditional relationship. This was particularly the case for resources, as colonisation was integral to capitalist forms of ownership. The introduction of the state and capitalist forms of relations account for the origin of a new form of relationship termed here as the instrumental articulation of kin groups.

3.2.2 ‘Discovery’

PNG existed independently outside of Europe until the Spanish made the first contact in 1525. This was the beginning of the ‘discovery’ attitude in PNG. While for the explorers, they were discovering new land, for the kin groups the explorers were visitors. What the PNG kin groups perhaps did not realise at the time was that the visitors were part of a larger movement that was to transform their society forever. Important and equally unknown to kin groups was that one of the motives of these visitors was the search for wealth, especially gold. While gold was of little practical importance to kin groups, it was the preoccupation of the visitors. Bernstein demonstrated that gold was in fact an obsession in human history:

.... People have become intoxicated, obsessed, haunted, humbled, and exalted over pieces of metal called gold. Gold has motivated entire societies, torn economies to shreds, determined the fate of kings and emperors, inspired the most beautiful works of art, provoked horrible acts by one people against another, and driven men to endure intense hardship in the hope of finding instant wealth and annihilating uncertainty (Bernstein 2000: 1).

Bernstein was referring to a long human legacy that extended through many epochs of human civilisations. From the ancient Egyptian civilisation in Africa in about 4000BC to the Lydian in Europe about 700BC, gold played a significant role in human activities. This role continued throughout the ages among ancient civilisations until the gold rushes of the nineteenth century that resulted from European colonisation of the World (Bernstein, 2000: 475). Gold and silver extraction from the Americas by the Spaniards has had significant impact upon Europe as more explorers travelled the world in search of gold. This process that began after the contact with the indigenous people of the Americas subsequently led to the discovery of gold in the New World and soon after in Australia (Bernstein 2000).

Bernstein's observation was applicable even in the context of PNG. In 'Black White & Gold' Hank Nelson wrote:

... Most of the men who came hungry for the gold were from Australia. They carried with them the skills to obtain it and the beliefs then common among Australian working men about foreigners and blacks. Most diggers believed that their guns and their brains made them superior to any 'coloured' men. Some also thought that they were physically superior, although that was harder to believe after 1902 when the first black American won a world boxing title. They did not doubt that they had a right to take the gold, and many thought that it was only a matter of time before an Australian possessed the land (Nelson 1976: v).

The relationship between miners and kin groups in PNG was of course more complex and varied, but the observation by Nelson was a good indication of the 'discovery' attitude predominant at the time towards kin groups. It showed not only racism, which was prevalent, but also and more importantly the attitude that miners had the right to take the gold. Such attitude had its origin in the notions of 'discovery', according to Burton (1997:28) in his work among the Ok Tedi People. The idea of 'discovery' was part of the colonial attitude of 'taking possession' of land found for establishing colonies and exploitation of natural resources.

In Papua New Guinea, John MacGillivray was a British government sponsored expedition naturalist who first found gold traces in native pottery in Redscar Bay located west of Port Moresby in 1848. His finding was the earliest evidence of

reported traces of gold. This kind of discovery, as in the case of the naturalist Woodford who discovered traces of copper mineral in Guadalcanal Solomon Islands in 1893, gave rise to mineral prospecting later on throughout Melanesia. In PNG, a further gold find by Captain Moresby near Fairfax led to arrivals of gold prospectors from Australia, so that by 1880 there were about 700 prospectors on Tagula Island, Milne Bay Province. As in the case of the 1851 declaration by Lieutenant Governor La Trobe in the Victorian Gold Rush, it led to the appointment of a state agent in 1881 to regulate prospecting. But this first gold rush could not be sustained and prospecting subsided until the year of the Australian federation in 1901. By 1906, British New Guinea became the territory of Papua (Zimmer-Tamakoshi 1998: 4). Further mineral exploration led to further gold finds at Yodda and Koranga Creek in 1922. These finds led to the discovery of Eddie Creek, Wau-Bulolo in 1926, which led to alluvial dredging on a huge scale which was considered the largest in the world, until 1965 (Banks and McShane 1998: 3).

The Eddie Creek alluvial mine was important in a number of ways. The first was that it was the most important mineral find in colonial Papua New Guinea. It led to the promotion of interest in mineral prospecting in PNG. Secondly, it also demonstrated how important Government officers were as part of the process of mineral prospecting. This can be seen in the case of a former Kiap, C. J. Levien, who was able to acquire the Bulolo River flats which he later sold to C.A. Banks of the Vancouver-based Pacer Development Limited. C.J. Banks was the first serious miner in PNG with the establishment of his company Bulolo Dredging Ltd. This company carried out dredging operations in the 1930s, until the Second World War. Operations resumed after the War, and continued until 1965.

The period between 1848, when the first trace of gold was first found, and the 1940s, when mining activities almost stopped, spans almost a century. This period was a period of extreme instrumental articulation rooted in the 'discovery attitude' towards kin groups in PNG. European material goods were a significant catalyst for the perpetuation of instrumental articulation of kin groups. These material goods were desired by kin groups, but also were able to perpetuate, instrumental articulation. These physical materials, such as iron implements and beads used for early exchange with the natives, were the major basis for forming relationships with the new arrivals.

This 'material articulation' was widespread during the early part of the nineteenth century. In the case of PNG's neighbouring Solomon Islands, the early accounts of the early traders give some insight into the process. One of these early traders was Andrew Cheyne. Leaving England in 1840, he sailed to the Pacific and based himself in Sydney (Shineberg 1971). European traders brought iron implements at the time, which the Islanders desired. Green's quotation of a trader's manual by Cheyne published in 1852 provided some ideas of traders' strategy:

..The goods most suitable for this Island are tomahawks, axes, adzes, chisels, saws, gimlets, scissors, good iron hoop, small iron pots, red cloth, gouges, files, fishhooks, assorted empty bottles and red, white, blue, green, black and yellow glass beads, large and small, and small boxes with locks and hinges (Green 1976:32)

Another account by Woodford in 1890, suggested that the Melanesians demanded specific goods when exchanging with traders, and he recommended that traders take with them goods demanded for exchanges (Green 1976:32). This practice was prevalent throughout the 1850s as well as in the 1880s. The traders were making exchanges for the Chinese trade in sandalwood, coral, sharks' fins and beche-de-mer and were trading with Melanesian. Similar trade was being carried out in Vanuatu (then the New Hebrides) in the 1830s. Shineberg makes the following point:

... Whereas the islanders did not understand European religion or social institutions and in any case had no desire to change their own beliefs, they understood European trade goods immediately. They knew a good tool when they saw one-there was no need to preach the superiority of steel to stone. They were excited by cloth and beads of textures and colours that they could not make themselves (Shineberg 1966:129).

The Melanesian desires for these material things were significant, as they could not make them themselves. This form of 'material articulation' was found only when there was a sense of reciprocal exchange. At the same time, the Melanesians appeared to have very little knowledge of why the traders wanted sandalwood. There was inevitably an information gap. Such attitudes were reflected in traders implying that natives knew little about the use and the value of the sandalwood (Shineberg 1966: 130). This knowledge gap was perhaps the most important difference that shaped the subsequent Melanesian relationship with traders, followed by the state and miners.

Melanesians were first articulated through commodities brought in by traders. The foreign materials, though simple but effective technology created more desires for them. This form of 'material articulation' rooted the desire for more external goods and created the conditions necessary for the subsequent exploitation of natural resources. But historians of Melanesia have different perspectives about the nature of what has been labelled 'material articulation' as a form of relationship. Researchers like Shineberg (1966:129) give the impression that these trading relations were of relative equal relations, that the trading was done from each party's stand point, in addition, sandalwood was not used for anything by the natives. However, some historians held that there was a strong tendency not to put human relationships into the equations of historical interpretations of early trading relations (Corris 1970; Maude 1968; Parnaby 1972; Shineberg 1971; Ward 1972). In other words, the omission of the Melanesian part of the story made it appear that whatever had happened was for the good of the Melanesians.

Thus whether it was early trading (Ward 1972: 394; Shineberg 1966: 416) or the subsequent labour trade (Corris 1971: 420; Parnaby 1972: 419) the nature of this material articulation was largely influenced by a capitalist form of relationship. While the Melanesian community had acquired experience over the years and their bargaining may have improved (Shineberg 1966: 416), in the end capitalist relations persisted and were reified as the state became more established.

The Capitalist form of relations consolidated after initial material articulation through trade, when colonies were established. Solomon Islands was colonised and divided between Britain and Germany in 1886 and moved in 1899 to its present site (Sack 1973: 78). Colonial possession of the island was done by declaration, as for example, the S.M.S. Adler's declaration of sovereignty over northern Solomons on 28 October 1886 by Germany (Sack 1973: 78). The colonial territorial acquisitions were for imperial interests, included trade. Gold as a commodity for trade was an important interest to the colonial powers at the time. The declaration of a territory made it a colony of the colonial power, which then was subjected to its control. This is the beginning of the process of not only material articulation but more importantly the establishment of 'legal articulation'.

3.2.3 Legal articulation

Material articulation opened the way for the introduction of legal articulation. Legal articulation began when a colonial power made declarations of possession of a territory and demarcated it. For example, in 1828, Holland divided the western part of the Island of New Guinea at the 141st meridian. The northern portion of New Guinea was occupied by Germany, while the south-eastern part was subject to British interests (Zimmer-Tamakoshi 1998: 4). Prior to the 1880s, Australian interests were largely economic, in labour trade and sea trades and mineral prospecting. As settlement intensified and the centralised state began to be set in place, the growth of legal articulation as another form of integration of kin groups became more prevalent. For analytical purposes, legal articulation can be considered to have started when the state was introduced as the new central authority among Melanesians. For the island of New Guinea, its division between Britain and Germany in 1884 would be marked as the new phase in its legal articulation (Sack 1973: 78). In the case of the Solomon Islands, this would equate to 1893 when Britain declared the islands under its protectorate (Allan 1957:36). The declaration of possession of colonies justified use of force to enforce the colonial power's position of control. This was generally labelled "pacification". Such examples as the first punitive expeditions of 1878 by the German settlers among the natives of the Gazelle Peninsula in New Britain (Sack 1973) are a case in point.

What is important in understanding the relationship over natural resources here is that, instead of the use of material articulation as seen during early trading period, what followed was the use of appropriation to enable access to natural resources by capitalists. With the state now having "possessive" rights over the colony, it prepared the legal form of articulation for the purpose of trade. It was also during this later part of the nineteenth century that minerals had been found, and it was under the legal tutelage of the state that this resource was articulated between the settlers and the Melanesians. Following the colonial declarations of sovereignty over Melanesian communities, a major legal instrument was the policy of the state ownership of mineral resources. Establishment of a colony meant mineral resources could be automatically rendered to the state. State control was sustained and only in some cases 'native' landowners were given some protection as in the Papuan Ordinance of 1907.

But the state retained ownership upon which fees were set for prospectors as in the case of the Mining Ordinance of 1922, where a fee of one pound per year was charged. Such Ordinances were repealed over the years as in the case of the Mining Ordinance of 1922 in 1928, and by 1940 it was known as the 1928-1940 Mining Ordinance (Nelson 1976: 256). These legislative instruments were developed to protect the interests of miners and the state, even where the costs were high to the kin groups directly involved. It was this form of legal instrument that perpetuated the instrumental articulation of kin groups.

In the Fiji colony, like many others, the policy on minerals was that the state holds the rights, and any other rights that obstructed the state's right were either circumvented or not recognised. For example, there was the case of the declaration in the 1930s which stated that the residence of indigenous Fiji villagers in the area of mineral interests was illegal. Such practices were legitimated through previous legal instruments such as the 1908 Mining Ordinance to circumvent the rights of the indigenous people in Fiji (Emberson-Bain 1994). This Ordinance entailed the dispossession of indigenous landownership rights. 'Emberson-Bain argues that these policies were the basis for guiding mineral policies in subsequent years, including post- political independence, and have effectively shaped attitudes, mineral resource ownership rights, policies and subsequent legislative frameworks ('Emberson- Baine 1994).

In PNG, Bulolo project, was only the substantial mining developments during the early post-war period. By this time, there were significant changes in the world stage and the demand for decolonisation. In this context, the present the state of New Guinea inherited its status from a process that started in 1962. According to Sack (1973), a UN visiting Mission advised Australia to establish a House of Assembly in PNG with most members elected. In June 1964, the Assembly convened its first meeting. Here the elected members served as quasi-ministers, parties were formed, and pushed by Minister for Territories Andrew Peacock and the leader of the Opposition and later Prime Minister Gough Whitlam political independence was speedily achieved in 1975. The Panguna Project was, in some sense, conceived and developed just before political independence.

The argument of this work suggests that despite political independence, the newly established state has simply taken the role of its predecessor and sustained the forms of articulations that are instrumental and marginalising of communities in PNG. The following mining development project cases in PNG will be described to show how instrumental articulation persisted in different forms.

3.3.0 Panguna project case

The Panguna Mine was the first major mine during the Post-War period. This began with prospectors arriving in Kieta in 1964 under the leadership of Ken Phillips (Denoon 2000:62). In April that year prospecting began and after a long process of exploration and dealings with the local people, Ore was looking good by the end of the year (Denoon 2000:62). Some eight years later Panguna commenced operation in 1972 (Hancock et al 1998:2). It was located in South Bougainville, within the North Solomon Province of Papua New Guinea. The area where the project was located belongs to an indigenous group of people known as the Nasioi.

The Nasioi people settled the southern part of the Island of Bougainville. Eugene Ogan (1999:1) claims that the name Nasioi was a term given to these people by the Germans at the beginning of twentieth century. The Nasioi are closely related to three other groups in the southern part of the island. Archaeologists suggest that the Nasioi's ancestors were earlier arrivals than other unrelated settlers in the north of the island (Spriggs 1997). The Nasioi, like many other Melanesians, depend upon the environment for everything they need for their livelihood. Ogan (1999) observed that the Nasioi had access to sago palms and products of the sea and settled different parts of their region. The coastal Nasioi in the south had contacts with the neighbouring descent groups on the Islands, particularly in the neighbouring Shortland Islands of the Solomon. Similarly, the highland settlers of Kongara area made contacts, as well as intermarried, with those of the Nagovisi groups. The scattered hamlets dotted throughout their territory characterise their traditional settlement pattern. According to Ogan (1999: 2) the Nasioi people never joined to form one political structure. This is reflected in the lack of defined chiefs. Instead, leadership was usually earned through hard work. This form of achieved leadership was dependent on individual success and

the ability to exert influence through distribution of wealth. The kinship system of the Nasioi was a moiety system where certain rights were passed through the female line.

During the late nineteenth century, imperial Germany and Great Britain had declared dominance throughout the Pacific. Germany's declared areas of dominance included Bougainville in what was called German New Guinea (Ogan 1999). This artificial political boundary was a root cause for modern secessionist unrest on the island. The attractive features of Kieta harbour were a factor of influence in the choice of colonial Germany to set up their administrative headquarters there in 1905. Nasioi lands were appropriated for the establishment of coconut plantations. The missionaries entered the area in 1902 as Catholics to proselytise the natives. Ogan (1999) argues that missionaries, planters and administrative officers enjoyed a standard of living higher than Nasioi people, and expressed racist attitudes towards them. The status of women among the Nasioi suffered as a result of the introduction of ideas of male dominance.

Trade was the main focus of the prospective planters that came to Bougainville. Land was acquired cheaply from the Nasioi (Ogan 1999: 3). The establishment of coconut plantations as a cash crop was motivated by the limited skill needed and the casual manner in which labour could be organised to do most of the tasks. This was an advantage to the planters as they did not have to do much training. But it worked against the Nasioi, as there was no provision of skill training. Ogan (1999:3) argues that this plantation colonialism did not educate the Nasioi, but raised many issues and confused them about the actual political, economic and social positions of the planters.

Relationships between the Nasioi and the plantation colonialists were predominantly characterised by instrumental articulation until the Second World War. There were no major mining activities at the time on the island. The exceptions were sporadic activities and explorations, which provided rudimentary knowledge of copper presence around South Bougainville in the 1930s (Bedford et al. 1977). The Japanese invasion of Bougainville, and the subsequent American intervention, halted development activities on the island. Following the war, Australian administration was restored in 1946 (Ogan 1999). The Nasioi's experience with colonialism, and the subsequent war, caused them to become dissatisfied with these interventions in their

lives. These effects, as well as their sense of close cultural affinity with the Solomon group rather than PNG, were an important basis for defining their relationships and identity.

Bougainville Island was administered as part of the Territory of PNG. As was the practice of the colonial administration at the time, the state or its agency regulated resource development for 'public interests'. Minerals were administered under the Mining Ordinances of 1907, 1922 and 1928-1940 (Bedford and Mamak 1977; Burton 1997; Nelson 1976: 265). In PNG, this mining legislation was the basis for the development of the PNG postcolonial Mining Act of 1977 and a later revision in 1992 (Burton, 1997). According to Bedford and Mamak, issues at the time were focussed on the state and company, and excluded landowners (Bedford and Mamak 1977).

Until the 1960s, there was limited mineral resource exploration. Although it was known that copper was present around South Bougainville in the 1930s, it was not until the 1960s that copper deposits were established (Bedford 1977:1). The Bougainville Copper Mine project development came at the time when there was little trust on the part of the Nasioi towards the state and private companies.

The kin groups in Bougainville, like others in Melanesia, experienced forms of relationships with planters which were far from reciprocal. Such experiences were generally the basis for opinions regarding later developments, including subsequent mineral resource development. In other words, instrumental articulation was becoming evidently unacceptable.

3.3.1 Exploration

From the start of the exploration, when Conzinc Riotinto (Australia) Exploration Pty Ltd (CRAE) obtained authority to explore some 630 square kilometres in South Bougainville in 1963, landowners heavily opposed the Panguna exploration work. Throughout the subsequent period until the signing of the Special Mining Lease (SML) in 1967, local opposition was consistent. The 1967 Agreement was particularly important because of the introduction of the Bougainville Copper Production statute which became the first such ratification of a mining project in PNG (Hancock et al 1998: 2). Thus, while the project began operation in 1972,

landowner resistance against the project had been consistent through the development of the project, well into the post- political independence period of PNG.

There have been a number of instances reflecting the direct application of state measures against the Nasioi people of Bougainville. The first instance was that despite the persistent reported opposition to the project, the state and the mining project went ahead. As Bedford reported prior to 1972 to 1974, there was strong landowner opposition (Bedford 1977: 4). The reason for this was that while Conzinc Riotinto (Australia) Exploration Pty Ltd (CRAE) was given authorisation by the state to prospect, landowners had little part in it. This situation was clearly demonstrated by Bedford when reported that:

These authorities required the company to pay an annual rent to the Administration, but the Ordinance at this stage did not contain any provisions for payment of an occupation fee to the landowners. The only compensation the latter were entitled to was some recompense for destruction of their personal property by the prospectors. Access to native land could be granted by the Administration without reference to the owners under the terms of the mining Ordinance (Bedford, 1977: 7).

This form of relationship articulated by the state dominated throughout the 1960s and 1970s. The persistence of government officials who accompanied geologists to "explain" mining interests by reminding the landowners of the law of ownership of minerals by the state was just an example of behaviour characteristic of instrumental articulation (Bedford 1977). Such attitudes towards kin groups in Bougainville gave them a sense of complete loss of control of their environment, people, and culture. This sense of loss was clearly indicative of the concerns of the Nasioi. For the Nasioi people, the project was not sensitive towards their concerns, which were far beyond the economic parameters contained in the mining agreements. For the Bougainvillians, their concerns were more social and cultural, as Kokare stated:

... a soft, quite world of green bounded by the bush and the mountains and the sky...populated exclusively by people who observed the same rules... OUR world, where we were the absolute, ultimate and final authority (Kokare, 1972, quoted in Bedford and Mamak 1977: 4).

Gaikovina Kula, writing on the subject of consultation with local communities during the stages of mining projects warned that:

...The bond between traditional land ownership and the processes for resources access and sustainable resource use can occur, but accountability for benefit sharing and resource use must build upon an appreciation of the deep, ecological, economic and social bond between land and the people across the Pacific island cultures....If mutual benefit is to occur (Gaikovina Kula: 1998:1, quoted in Bedford and Mamak1977).

The early resistance to the development of Panguna suggests that the Nasioi kin groups were not impressed with the nature of relations involved in the development of the project. In a sense, it was a direct resistance to instrumental articulation in mineral resources development.

3.3.2 Ratification agreement of 1967

The important feature of Panguna in terms of relationships with landowners was the ratification of the agreement between the state and the mining company (CRAE) in 1967. Ratification was the idea of making an agreement for the development of Panguna under a 'special' Act of Parliament, which was in effect a 'ratification' process. It was a form of instrumental articulation because of the implied aim of legal self-containment of the project. Early attempts by Ross Mining NL for the ratification of the Gold Ridge project in Solomon Islands made me aware of this strategy. While ratification was refused for Gold Ridge, it was applied in the case of Panguna. In the case of Panguna, the imminent political independence of PNG was a likely motive for ratification adopted by the project. The problem with such a form of ratification was its ability to operate the project in a legally confined form, separate from the wider community in which it was located. In this case, the community refers to the PNG nation as whole. This meant if there were to be any legal changes within the normal process of the territory's legislative process or even the eventuality of gaining political independence, then the project would remain secure under the arranged ratification.

Ratification was consistent with existing mining ordinances. In other words, while existing mining ordinances had contained provisions for compensation since 1907, such ordinances restricted any compensation merely to personal properties (Burton 1997). The practice of legal control of sub-surface minerals was carried out through such legal instruments such as the 1908 Mining Ordinance. This act, in effect,

circumvents the rights of the indigenous people as her study reported (Emberson-Bain 1994) in gold mining in Fiji. The 1907 Mining Ordinance in PNG simply declares 'national interests' over the rights of the specific groups of people directly affected by such mining ventures. Clearly landowners' disputes over Panguna could never have been resolved under the existing policies governing land and mineral resources in such a tribal community. In the case of Panguna Project, ratification was therefore an extreme form of instrumental articulation of kin groups.

In hindsight, there was the tendency to think that perhaps there should be more negotiation with landowners, minimisation of environmental damage, and tougher government action (Denoon, 2000:1-10). But on the other hand, perhaps even further negotiations could not have made any difference since the existing legal instruments already structured the basis for relationship over the resources at the time.

In summary, the Panguna mine project was not a project supported by the Nasioi people. It was a project planned and implemented by the state and the mining company with landowners seen as a "mere" inconvenience to the project. The reliance on the existing legal framework presumed the state right over landowners, which was a fundamental basis for the subsequent relationship with the Nasioi community. While Panguna was able to operate for more than fifteen years, before the crisis that led to its closure in 1989, such operation was only sustained by the knowledge that the state had the presumed legitimacy of use of force against any resistance to the project. The Panguna project was a case of instrumental articulation at one end of the scale of possible forms of articulation of relationships.

3.4: The Ok Tedi project case

The kin group resistance to the Panguna Mine Project came as a lesson to the government and the mining company in relation to the need to reconsider their approach to landowners. However, the newly independent state of PNG appeared to follow the same models of mine arrangements in the Panguna mine project that had processed during colonial administration. The Ok Tedi project was ratified to legally

cocoon it from other legal state interventions, such as increased taxation policy changes. The Ok Tedi story was similar to the Panguna mine project.

3.4.1 Wopkaimin people

The Ok Tedi mine was located on the mainland, as opposed to the islands of PNG. This was in the Star Mountain area of North Fly that was said to be the most isolated region of PNG. The people there were described as people 'seen but not heard' because the company portrayed them as though they were only discovered in 1963 (Bechtel – MKI, 1981:7). The government patrol made by Des Fitzer was thought to be the first undertaken in the region (Browne et al. 1983: 67). According to John Burton (1997: 31) this view of a recent discovery of the Star Mountain people was incorrect. Incorrect it may be, but such portrayal of kin groups was part of the 'discovery psyche' prevalent over many years. It was an important attitude characteristic of instrumental articulation.

On the story of the first contact with the Ok Tedi people, it was suggested that the earliest visitor to these people was an Assistant Resident Magistrate in Daru by the name of Leo Austen in 1922, who called them the 'Western Tedi' and the 'Eastern Tedi' peoples. These were the Yonggom and Awin villages respectively. Hyndman (1994: 71) made the same observation that the Wopkaimin did encounter Austen in 1922 in the Iralim Parish. The Iralim were the principal landowners of the Ok Tedi Mine land area. Hyndman also suggested that between the period of 1952 to 1961 there were nine government patrols to the area. In other words, the Ok Tedi people had made contact with other people outside of their immediate environment much earlier. The recent emphasis on their recent 'discovery' was more likely to be an instrumental strategy by the prospecting company rather than a genuine historical account of cross-cultural contact.

The Wopkaimin people were horticulturalists and were observed by Des Fitzer as having large gardens and an abundance of food. Hyndman (1982: 21) suggested that traditional Wopkaimin diet had the highest proportion of meat seen in any PNG population. Like many other Melanesian traditional societies, the Wopkaimin also possessed cultural mythology about their land area, as in the case of the culture

heroine Afek (Brumbaugh 1990). Their cultural system links their societies to each other through myth, ritual and oral history, and therefore there were more links to the other Min groups than often acknowledged. They were a functioning social community.

3.4.2 Early exploration

The Kennecott mining company was the first to prospect in the Ok Tedi area, but the company withdrew after hearing that there was a re-negotiation of the Panguna Agreement in 1974. The PNG government responded by forming the Ok Tedi Development Company (ODC) in 1975. But at this stage, the knowledge about the prospect suggested a marginal deposit, and no individual company was prepared to take the risk individually. BHP showed an interest, although this was conditional on reducing their risk, and therefore a consortium was promoted. This included the German company Kupferexplorationsgesellschaft, Amoco Minerals, and the PNG Government who formed the Ok-Tedi Development Company in 1975 (King 1975). The project faced a number of problems, one of which was the geological instability of the area, including the site selected for a tailing dam. The Ridge behind the tailing area called the Vancouver Ridge collapsed in 1989, and the company then argued that a tailing dam was not feasible. This situation was made worse with the world price for gold fall, and over-runs the construction costs between 1982-84. Later on, there was also the ever-rising Panguna crisis which closed the mine in 1989. The subsequent withdrawal of some of the members of the consortium, namely Amoco selling to BHP, made the PNG government support increased production, and shortcut environmental requirements.

3.4.3 Ok Tedi agreement Act

OK Tedi Mine soon followed with gold and copper extraction in 1984 and 1987 respectively (Hancock et al. 1998:1). The landowners played little part in the decisions leading to mineral development of the mine. Like Panguna, it was administered under its own legislation in Parliament known as the Ok Tedi Agreement Act (Hancock 1998: 128). Burton (1997) provides one explanation for the

exclusion of landowners in the Ok Tedi case. Burton argues that mining developments have always been associated with an attitude of 'discovery' of natives. The idea of discovery by miners gives the impression of miners taking the trouble to enter these difficult environments for the discovery of minerals and the subsequent development which implies a 'coming to an area' to rescue people from isolation. Burton suggests that this form of attitude is important in understanding the way the state and miners deal with landowners and define their responsibility. In a way, this attitude of patronisation of landowners also contributes to the state and company attitudes towards landowner issues.

What Ok Tedi does show is that the independent state of PNG had followed the same instrumental logic as the prior colonial government. Like the Panguna project, the Ok Tedi project was administered under an 'Act of Parliament'. An 'Act of Parliament' was a ratification form of agreement. The PNG state was also prepared to ignore its environmental responsibility to the Wopkaimin people, to whom the environment was more than a simple mineral resource deposit. As with the Naisoi kin groups in Panguna, the Wopkaimin kin groups experienced the same attitude from the state and the mining company. In summary, the Ok Tedi Project was yet another example of instrumental relations. It placed landowners' interests at the lower level of significance than their expectations. However, after the Panguna crisis and the increasing public knowledge about environmental disaster in Ok Tedi, there were signs of change in attitudes towards kin groups in PNG mining development. This was the desire to 'consult' more closely with the kin groups directly affected by mining projects. The next two cases of mining projects in PNG will examine this change in attitude and evaluate the form of articulation.

3.5: The porgera project case

The Porgera Joint Venture project was, from the perspective of interaction process, the first sign of improvement in terms of relationships with kin groups over natural resource use. It had to take the experiences of the Panguna crisis and then the emerging knowledge about environmental threats of the Ok Tedi mine before some changes in process were envisaged in terms of relationships with kin groups in PNG. Porgera was, in this sense, the first stage in the change of attitude in terms of process.

There were shifts in the processes of opinion about kin groups; there were shifts in the nature of interaction with kin groups; and also there were changes in actions towards some of the demands of kin groups. But at the same time, unlike other previous projects, in Porgera the normative features that govern these processes persisted. Such features include roles played by each stakeholder, the rules governing natural resource use, and the goal of the project.

3.5.1 Porgera community

The Porgera Joint Venture (PJV) project was located among the area of the Ipili cultural and language group of Porgera. The Ipili speak the Ipili-Paiela language and numbered some 3000 in the mid-1950s (Burton 1991: 5). Burton suggests that the earliest patrol contact with the Ipili was in 1934 by the Fox brothers, and later in 1938 by the Hagen-Sepik expedition (ibid 1991: 5). Porgera remained largely outside the cash economy until large scale gold prospecting in the 1980s and the construction of an all-weather road to Wabag. Burton suggests that after the 1980s there was increased social change as the result of two major events. These were the Mt Kare Gold Rush during 1988 and the signing of the SML Lease agreements for the Porgera Gold Mine during 1989 (Burton, 1991: 5).

landowners in the Porgera gold mine project were often referred to as 'clans' by the PNG media and the local elite. Thus the following landowner 'clans', Tieni, Tuanda, Waiwa, Angalaini, Pulumaini, Maimai for example were used, according to Burton (Burton 1991: 8). But these names were names of lineage founders and lines of descent rather than category names or segmentation names. Burton explained that membership is much wider than often presumed on the basis of 'clans' that were supposed to reside in a specific locality. Rather, landowners were more like members of a parish, and both agnate and non-agnate cognates can have equal rights in land (Burton 1991: 9). At the same time, such rights are subject to the individual behaviour of each member. For example, a member's absenteeism from duties and roles within the Parish was usually discouraged. However, the mining project also attracted a large immigrant population, and the Porgerans found it difficult to send these people away. The Porgera Joint Venture Project, like other previous mining projects, had similar effects on the society of the kin groups directly involved. This meant the effects of

pulling kin groups into a cash economy and the expansion of the local population as a result of immigrants seeking jobs or brought in by the company's presence. But the Porgera project was the first to seek wider consultation that would include kin groups.

Following the exclusion of landowners in Panguna and Ok Tedi Projects and the subsequent Bougainville Crisis, the case for the inclusion of landowners was emerging. This process of inclusion was better known as a 'Development Forum', which was applied in 1988. In the Forum, issues discussed included equity participation by landowners and the provincial government, infrastructure, and business development and environmental impacts. This process of a 'Development Forum' was the basis for negotiating the Porgera Joint Venture Project.

3.5.2 Porgera development forum

The application of a 'Development Forum' was an important change in the way relationships were conducted with indigenous Papua New Guineans. The 'Development Forum' process for Porgera was completed in April 1989. Three Memoranda of Agreement were signed the following month. The Porgera 'Development Forum' was also important in setting new precedents, such as the provision that landowners receive royalties of at least 20% levied on the gross export value of the mine. There was also the use of Porgera forum agreements as the model for future tripartite negotiations. Finally, there was the assumption that in each such Development Forum for a particular project, the provincial government will receive a 'Special Support Grant' from the central government, valued at 1% of estimated value of the mine's annual export.

The 'Development Forum' was, in the sense of including kin groups, a significant improvement compared to the previous projects. At least kin groups were given attention by the government in seeking their endorsement of government conditions for mineral resource development. Apart from the government's willingness to seek kin group endorsement, there was also the right of kin groups to be part of decision making, and this was achieved through memoranda of agreement. In other words, there was a significant change of opinion or attitude to kin groups in relation to

natural resource use: the idea that kin groups were a genuine threat to the project if their concerns were not taken into account. The 'Development Forum' was not only a reflection of attitude changes, but it also reflected changes in the nature of interaction. Kin groups were now allowed to be part of the discussion from which they were excluded in previous projects. Further on, the Development Forum process also reflected changes in activities in that kin groups were also entitled to some form of benefit from the project.

But being part of a consultation process itself is no guarantee that there is automatically fairness between the 'stakeholders'. Similarly, just because kin groups were able to sign the dotted line in the memoranda of agreement did not necessarily show that the right decisions had been agreed upon, or that all 'stakeholders'' interests were equally protected. Also, just because kin groups had endorsed government conditions, and had also signed agreements, this was no measure of a success of a project, at least for kin groups. This situation points to the concern raised by Ballard in his observation of mining projects that success cannot be fully determined until the stage of mine closure (Ballard 1998). In other words, a full accounting of the pros and cons of a project can only be fully recognised once the mine has closed and its effect fully accounted for. But one does not have to wait until the closure of a mine to recognise periodic performance of a mining project. In the case of Porgera, annual reports provide some indications about the nature of the project and its performance in relations to the expectations of kin groups. Glenn Banks and Susanne Bonnell jointly produced one such report in 1997 (Banks & Bonnell 1997). The report was a snapshot of the social, economic and cultural changes occurring in the PJV project area. This report shows that even in the case of Porgera, where wider consultation was encouraged, landowner issues appeared to remain. Banks and Bonnell report on social monitoring outlines four major areas, administration, social, infrastructure, and economy. Apart from these four major areas of social monitoring, there were also issues relating to SML and concerns to the community.

First, the report outlines government functions expressed through the Public Service, the Porgera Development Authority, and the Local Government Council. The report suggests that government functions in terms of services in Porgera declined in 1996. This was due to the usual problems of funds, logistical support and office equipment.

This government service situation was contrasted with the better resource conditions of the Porgera Development Authority. Funds and technical support for public service was not the only problem, there was also a geographical demarcation problem. That was the issue of whether it would be administered under Lagaip district or Laiagam District. These administrative problems also included the status of the Porgera Development Authority. Initially, the problem was of government funding the operation of the Development Authority in 1996. A more serious problem was the legal status of the Development Authority under the government's initiative in reforming local government. This was the Organic Law on Provincial Governments and Local Level Governments (OLP&LLG). Apart from the legal confusions associated with the OLP&LLG, the existing local government did not have funds to run its affairs. The administrative reform envisaged devolving the responsibility of primary health, elementary education, women and youth programs, village court, and infrastructure. Infrastructure responsibility would involve developing and maintaining rural airstrips, feeder roads, bridges and small ship wharves.

Clearly the performance of Government duties in Porgera had been hampered by lack of funds and general logistics, but also the relative difference of capacity between the existing government and the mining project. One of the recommendations of the report was for the Porgera Local Government Council to request assistance in terms of expertise to provide advice on an organisational framework for the Council.

The above administrative situation in Porgera implies a number of important considerations. The first is that the state machinery was not functioning properly. In a situation where the government lacks funds and general logistical equipment for operations, this administrative handicap gives clear indication of the inability to monitor the project in the first place. This was not a good position to negotiate on equal terms in a project involving the state and company, and equally involving the company and local community. The second consideration is that because local governments not only lack funds and equipment, but also necessary knowledge for management and administration of their own affairs, they also become dependent on hired experts. This situation denies strategic capability and responsibility on the part of the local government to guide development in the area. This administrative weakness makes the government dependent on the generosity of the project. This is a

situation of instrumental articulation where one party is in a strong position of control of the environment in which the project takes place.

Apart from the state being dependent on the mine for some of its administrative responsibility, social conditions in Porgera did not meet the general expectations of kin groups. Instead there was population explosion creating an environment of social uncertainty. There was an increasing need to have knowledge about the population so that the limited resources could be directed to priority community development issues. Banks (1996) observed that the issue of law and order remained a central problem in Porgera. The issue of prevalence of law and order problems meant there was further demand for law enforcement agents, especially increasing the number of police and reservists. The problem of law and order was further compounded because the village courts were also less effective as a result of lack of training, management and finance.

Discrimination against women and the issue of delays by bureaucrats in gazetting passed laws were also problematic. It was suggested that institutional strengthening should be pursued where the Village Courts should pursue a joint venture between the provincial government and the PJV. Under such an arrangement, the PJV would provide an officer to work with a village court inspector to set up the system. Any improvement in the institutions of court was considered essential, as cases of tribal fighting, crime and civil disturbances were reported as common occurrences. Some of the civil disturbances involved landowners' refusal to allow the project to clear roads and some involved compensation payment grievances leading to damage to company property. There were also rises in other social crimes and issues such as domestic violence, use of drugs, prostitution, gambling and unemployment. There were numerous suggestions to deal with these increasing social problems in Porgera, one of which was for the Porgera Local Government to establish Peace and Good Order Committees in all Council wards. Clearly law and order remained a central issue in Porgera.

The above social problems only demonstrate that a mining project may help the community in providing employment, but it may also provide new social conditions that give rise to new sets of social problems. The immigrant population, violence, drugs, prostitution are some examples.

Apart from law and order issues, health, education, women and youth issues were also important in demonstrating that the mining project involvement in these areas was, at best, instrumental, and at worst, a destabilising force in the community. Thus, the Porgera mining project remains instrumental despite a relative decline in instrumental relationships in terms of process. In other words, improvement in process towards the goal of mining development is not sufficient to improve kin group social development without corresponding improvements in the nature of normative structures that govern those processes.

3.5.3 Articulation issues

On the face of it, the Porgera Joint Venture project was a success for the PNG mining industry. As described earlier, such success could not be denied in relation to changes in attitude by both the state and mining company to the kin groups' right to decision making affecting the project. The state's change of approach through the use of the instrument of the 'Development Forum' was the main characteristic showing the changes in mining development processes in PNG. But beneath the veneer of changes in attitude to kin group relationships, there remained the instrumental objectives of those attitudes. In other words, the change of attitude to kin groups did not significantly change the fundamental goal of project development. Kin groups were once again materially articulated instead of making kin group development goals one of the major purposes of natural resource development.

There are a number of examples to demonstrate that despite changes in opinion and the forms of interaction, many of these activities may not be sustained for the long term development of kin group communities. For example, first of all, the company acts instrumentally in terms of health. The state's incapacity to provide health services meant that the company, in providing a relatively self-sufficient clinic, undermined the state's position as the main health provider. In Porgera, the mine clinic provided primary curative health care. The PJV operated Medical Centre and the Porgera Health Centre operated by the government appeared to work closely together. However, it was clear that the PJV health operated centre was well equipped and had greater resources, in financial and technical terms, than the Porgera Health Centre.

This situation gave the impression that the mine was a better health service provider, although such service would only last as long as the mine is in operation, and is often only directly beneficial to a small proportion of the population.

Secondly, in the area of education, although a vital social issue, the emphasis on cash often undermines development of educational culture. The basic objective of the mining project was the extraction of the mineral resources for world export. In this sense it was financial goals that were at the heart of the mining project for the company and the state. The kin groups too were drawn into this cash expectation from the project. Their collective goals were made peripheral to cash expectations. This was expressed through attitudes towards education, for example the problems of lack of curriculum materials, teacher absenteeism, student absenteeism, parental attitude and lack of community support.

Thirdly, since the mining project was about financial profitability for the company and material acquisition for kin groups, social norms within the society in which the mining takes place were also marginalised. For example, there was a disruptive effect of alcohol use by family members and an increase in polygamy. There was also the effect of gambling. An important concern by women whose land was used under the SML was the shortage of land for subsistence use. The women were not the only ones with these concerns. The youth too had concerns ranging from the increasing number of young people engaging in prostitution, use of marijuana, lack of education, employment and discontent with traditional lifestyle in favour of cash lifestyles. In other words, kin group society's disintegration was significantly contributed to by the mining project. Physical relocation of kin groups was part of this disintegration. From the point of view of the state and the company, this social disintegration was an acceptable cost for the greater good of economic development. In other words, kin group social and cultural disintegration was of little significance in relation to profitability and expected economic growth. This is a clear indication of instrumental articulation, because the company and the state take advantage of their position of influence in developing projects that directly and heavily impact on all aspects of kin group society. The only reason that mining projects did not seem to fall into the 'cultural genocide' category is because this is defined on the basis of development for the benefit of all.

Fourthly, even in the area of the Tax Credit Scheme (TCS), elements of instrumental articulation were also obvious. For example, in the area of infrastructure development Banks (1996: 34) reported that the Tax Credit Scheme started in 1992, and over K10 million had been spent on infrastructure in Enga. The report suggested that over the following three years, 80% of this money was spent on road projects and that 90% was spent outside Porgera. Since 1994, local landowner pressure on the TCS project shifted the emphasis to the Porgera area itself. Thus, it was reported that four TCS projects were completed in 1996. This included the Porgera-Paiela road at a cost of K400,000, and the Mungalep-Yuyan road including a bridge over Kaiya River worth K286,000. The other two projects were a teacher's house at Paiam Community School worth K35,000 and a double classroom at Kolombi Community, Paiela worth K55,000.

The instrumental aspects of the above Tax Credit Scheme are obvious in two ways. First of all, while road infrastructures were essential for the development of kin groups in the area, the intensive use of such infrastructure was largely significant for the state and the company to facilitate commercial activities during the life of the project. Infrastructure development should be justified on the basis of its further maintenance and use after mine closure. This means that such infrastructure projects cannot be exclusively justified on the basis of kin groups' priority demands and needs so that the credit scheme arrangement was applied. The Tax Credit Scheme arrangement was based on the logic that the company was willing to construct projects for the community as long as the community decided that such an identified project was important. After the completion of such a project, the costs were usually reimbursed to the company through tax deductions. The problem with such an arrangement was that in the case of road projects not only were they meant to be the state's responsibility, but they also took up most of the resources. In the Porgera case, it became obvious from the Banks' report that 80% of the money under the scheme was spent on roads.

The instrumental aspect of this Tax Credit Scheme, apart from financial bias to roads rather than projects that benefited kin groups directly, was in the sense of company participation in development. While the company was involved in the construction of

projects under the Tax Credit Scheme, in effect it received the recognition for its involvement. However, in essence such projects were government funded projects through the tax credit provision. In other words, the company built a good reputation at the cost of the state and the kin groups. This would also qualify as an instrumental form of articulation of kin group relations.

Finally, the Porgeran economy, as suggested by Banks' report, became increasingly reliant on the cash economy in the area (Banks 1997: 39). This follows from money received into the community through wages, business contracts, and compensation payments. Banks calculated that the compensation payment between 1993-96 amounted to a total of K10,985,000. In terms of wages earned, some K5,565 million dollars were paid to some 886 employees in 1996. Banks also reported that royalty payments were paid by PJV at the rate of 1.25% of the value of production. This was distributed between several groups, with the Enga Provincial Government taking 50% and the Porgera Development Authority 5%. The remaining 45% of the 1.25% royalty was distributed between SML landowners (15%), SML landowners Children's Trust (10%), Porgera Landowners Association (12%), and SML Young Adults (8%). The royalty rate was revised in 1997 from 1.25% of gross value of production to 2% (Banks 1997:41). In other words, the result of the development of the Porgera Mine is the increasing integration into the cash economy. While in the short term this appears attractive, one of the difficulties of assessing a relative worth of the project to landowners is the lack of a common definition of entitlements for major stakeholders. In other words, in a complex event such as a mining project, how does one quantify and justify that what the company and the state received as benefits were actually their rightful entitlements? While there are risks to be shared among players, for the kin groups there is the long-term environmental concern and the social consequences of the project's development. This is particularly the case with problems associated with social and cultural disintegration related to the inception and development of the project in societies such as that the Ipili.

In summary, this project was successful compared to what happened in the previous cases of the Panguna and Ok Tedi Mines. While the first two projects' relationship was one of limited engagement with landowners, wider consultations with landowners were made at Porgera. This allowed for the establishment of various *komitis* dealing

with landowner problems and concerns. The Porgera Project was in a sense the first mining project where a Development Forum was used. In the Forum, issues discussed included equity participation by landowners and provincial government, infrastructure, business development and environmental impacts. These were essential changes not known in PNG's history of development with kin groups.

While this wider consultation process was successful, it did not resolve fundamental issues concerning landowners but rather allowed for cooptation of landowners in dealing with the project. The issues of appropriate compensation, improvement of social services, and reproduction of a dynamic developing community remain illusive. It does suggest that reducing active conflict by improvement in the processes of interaction is only part of the problem or concern of landowners. The other part is the need to identify how mining development can directly be part of creating the long-term dynamism necessary for active community development. Thus, while the Porgera mining project has helped in creating a cash economy, sustaining this new form of economy remains problematic. In the final analysis, the question of what constitutes a successful mining project for Ipili society remains a debatable issue. In a sense, if mining projects remain a means for accessing materials for kin groups, then material articulation remains. Therefore the goals of making a mining project the basis for developing a dynamic society among the kin groups directly affected remains distant.

3.6. Lihir project case

The use of 'Development Forums' as a method for securing landowners' endorsement of government conditions was first applied in the Porgera mining development project. It was this model that was also applied in the Lihir mining project. Before describing the Lihir Development Forum, I will first describe the Lihir Community.

3.6.1 Lihir community

Lihir comprises one large island, namely Niolam and four small islands or Ihot ('stony places') (Filer 1988: 2). Niolam is the major island with an area of 200 square kilometres, while the three small islands make up less than 20 square kilometres. The Lihir mining project operation takes place in the Luise Caldera, which is half way down the eastern part of Niolam Island. The major infrastructure, apart from the mine, consisted of a ring road around Niolam island, which connected other facilities such as, the mining township, the airstrip, the mission station, and some twenty coastal villages (Filer 1998: 2).

The majority of Lihirians live on the main island of Niolam, while a third live on the other small islands. The population of Lihir at the 1990 census was 6,805 (Filer, 1998:2). It was ascertained that the growth rate was 2.5% per annum. The population by 1998, would have been about 8,291 Lihirians. Most of this population was comprised of members of some organised religion. For instance, 80% were Catholics, with the remaining members of the other denominations such as the United Church and Pentecostals. Outside of the church affiliation, most Lihirians consider themselves members of 'clans' with some degree of membership in the mine area. The mine lease areas that fall inside the customary land jurisdiction were about 2,700 hectares, which Filer suggests represent 15% of Niolam land area. The actual population directly affected in terms of geographical village location or lease area villages was approximately 20% of the population. Some of these are not involved in the mine lease areas.

The important feature of Lihir in terms of location has to do with its island status. Unlike mainland PNG, mining in an island environment implicates many other issues beside environmental concerns. The story of Lihir is also seen as a success story for PNG, as was the case of Porgera. This perception was due largely to the method of establishing relationship with kin groups through the Development Forum process.

3.6.2 Lihir development forum

Lihir negotiation was based on lessons from Porgera, in particular in the approach to landowners through wider consultation known as the 'Development Forum'.

The Lihir Development Forum was first initiated at Port Moresby Travelodge on the first of November 1993 (Filer 1996: 68). Like Porgera, Lihir was to be established as a Joint Venture and the central negotiation issue was the distribution of equity in the Joint Venture (Filer 1996: 68). The PNG Mining Act of 1992 made statutory provision for the government to purchase 30% equity from a mine project. It was the distribution of this equity right between the central government, provincial government and the Lihir community, which dominated this early phase of the Lihir Development Forum. The issue was that the provincial government was to have a third of this equity and the remaining two thirds of the equity entitlement were to be given to the Lihir Community. One suggestion by the government was for the Lihir community to acquire a further 20% equity right, which would mean the provincial government and Lihir community would be entitled to 50% equity. But any endorsement of such concessions would implicate changes in previous project agreements and PNG politicians were not prepared to go that far. Instead as reported by Filer, leaders such as John Giheno opted for precedents set in previous agreements (Filer 1996: 68) which entailed the granting of a 15% stake in the Joint Venture to the Lihir community on the condition that the provincial government give up its demands.

The 'Development Forum' was resumed at the Malangan Lodge in Kavieng on 27 February 1994. According to Filer, most issues were resolved during a two day meeting involving distribution of royalties and expenditure of the Special Support Grant (Filer 1996: 69). At this stage, apart from the equity issue, most other demands were relatively settled. This included 20% of royalties to be paid in cash to project landowners, while 30% was to be paid to the Nimamar Development Authority (NDA). The NDA would also receive 30% of the Special Support Grant made available for 'community projects' in Lihir District.

The equity issue and the K500,000 government cheque to be used as initial capital for Lihirian companies were the last concerns dealt with before an agreement was signed.

The mining development contract for Lihir was eventually signed on 17 March 1995. This was only after Prime Minister Chan negotiated with Lihirians to accept a government offer of a 15% equity stake to the community. This change allowed an overall raise of the royalty rate from 1.5% to 2% of total export value, and the development of the Lihir Ring Road to be paid, under the government's tax-deductible expense.

Thus the Development Forum process has once again worked for the PNG government and the mining company. This process was more formalised in the case of the Lihir project, as stakeholders were brought together through the various representative organisations of the various interests in the project. This organisation involved the Lihir Management Company (LMC), the government (in the forms of PWA, DMR, DNIP and NDA) and Lihir Mining Area Landowner Association (LMALA). The government here refers to the Development Management Resources (DMR), Department of New Ireland Province (DNIP), Provincial Women's Association (PWA) and the local government expressed as Nimamar Development Authority (NDA) (Filer 1998:7). Through these representative agencies the Development Forum process for Lihir was legitimised. The result of the organisational arrangements in the negotiation of Lihir project was the agreement on the Integrated Benefit Package (IBP).

3.6.3 Integrated benefit package

The Integrated Benefit Package included compensation payments for damages, equity, royalties and a relocation scheme for those directly affected by the project. In terms of royalties, the SML landowners were given 20%, while the local community as a whole, through NDA, was given a 30% share for project development (Filer 1998: 15). In some sense, it can be argued that the 'Development Forum' that allowed the signing of the project for development by all stakeholders has been successful. As Filer has argued, the Lihir project has not been subject to the degree of verbal and serious confrontations that had characterised other projects in PNG (Filer 1998).

However, as Filer observed, even at the early stage of the Lihir project, it seemed on the face of it that the community had made a good deal (Filer 1996: 69). In effect,

much of the gain was made at the expense of the state. In the end, the Lihirians remained unsatisfied as the 'Development Forum' process was not ceremoniously celebrated. Some of the leaders remained unsatisfied with the agreements and therefore many of them did not turn up for the ceremony on March 26th, 1995.

According to Filer, when the Integrated Benefit Package was signed, the land area leased under customary tenure was divided into 140 'blocks' of different size and the majority of the blocks assigned to a single 'block executive'. The compensation agreement agreed to the existence of 90 block executives who had claims over one or more of the 140 blocks, whether disputed or undisputed. There were 58 block executives who had claims over the 1250 hectares of customary land within SML, and the remaining 32 block executive made claims over blocks in other lease area. The importance of the SML landowners was their right to a share of 20% of the mining royalties, including compensation for damages and destruction. In total, there were about 75 of these individuals who were expected to earn about K 20,000 from royalties per annum. But, as Filer has observed, these incomes did not lead to formation of a business class, but rather were wasted through other means.

The Lihirian experience has shown that despite the Development Forum process, the deals reached were made mainly by men and confined to a small percentage of the Lihirian population. In a society where members of the community were dependent on the environment, any benefit confined to a small percentage of Lihirian 'big men' only demonstrates that goals of the kin group society were equally marginalised. Therefore, despite any relative gains in material goods through the cash provided by the project, benefit-sharing at the level of the community remains a problem.

3.5.4 Articulation issues

The Lihir Development Forum engaged with the kin groups of Lihir to a greater extent. On the face of it, as Filer himself suggested, it appears as if the kin groups have been successful. In other words, the Development Forum appears to be the model method for development of natural resources in PNG. Following the Panguna crisis and Ok Tedi environmental disasters, this forum method seems to secure the basis for future development in PNG.

But success in mining development depends very much on the question of whose success has been considered. In relation to the state, the signing of the agreements would be considered a success, because economic activities were expected to follow. Similarly, the company would see signing of the mining lease as success as well. For kin groups too, they would consider some degree of success because the 'Development Forum' process allowed for their participation through consultation. But while the company may have secured profits for its shareholders and the government expected the taxation system to raise revenue for the national budget, the attainment of kin group goals remains illusive. In other words, although there is mining development, there is no kin group development.

Filer also recognised that benefits from the Lihir project never led to 'formation of a business class' among the kin groups. Instead, their benefits were wasted through other means. One way to interpret this kind of observation is to say that it was the fault of the kin groups that they could not develop themselves after the establishment of such a mining project. On the face of it, this seems quite a legitimate argument and often it has been the argument for many other projects in other areas of natural resources, such as forestry development in Melanesia.

But what has not often been asked is the role of structural transformation in society. There is an inherent assumption that there is only one way to go about natural resource development. This means that the state controls ownership of natural resources and that kin groups are to be merely compensated for the inconvenience caused by the state and miners. But natural resource use is also about the survival of kin groups whose environment and world is severely displaced in the name of economic growth.

While it could be argued that there has been social transformation of kin group society since contact, it must also be pointed out that such transformations have been uneven in PNG and in other Melanesian countries. It is also important to note that, while transformations have occurred, it is the reproduction of structures that resulted from such transformations that concern kin groups. In other words, since outside contact with Melanesia, the relationships between Melanesians and the imposed state were

largely instrumental. They began with instrumental articulation based on materials that did not exist in Melanesia and were desired by Melanesians. They could only be obtained by giving away resources. This process was firmly established due to the establishment of colonies on the basis of legal articulation with kin groups. The legal aims of the state were largely to access kin group resources for the purposes of sustaining itself. Companies were, in some sense, agents of the state because the state depended on their functions for its revenue. The commercial companies in turn required natural resources not only to sustain their own growth but also the growth of the state. The implication of this situation is consistent with John Connell's observation that while mining development may benefit national economic development, a situation where the goals of kin groups have been successfully linked to those of mining corporations has yet to be seen (Connell and Howitt 1991: 1).

In the context of Lihir, Filer listed seven categories of impacts which included: resource scarcity, influx of aliens, law and order problems, unequal income distribution, subordination of women, power struggles within the community, and project dependency syndrome (Filer 1998: 5). In terms of resource scarcity, this involves scarcity in subsistence resources such as bamboo for traditional huts. There was also a shortage of land for gardening and even coconut fruits to feed their pigs. Immigrant populations became an important issue because immigrants begin to populate the lease area villages. Some immigrants were found to occupy houses constructed for Lihirians under the Project's Village Development Scheme. Apart from resource scarcity and the immigrant problem, there was also a law and order problem as a result of drunken behaviour among the lease area villages or relocated villagers. There was an issue of 'haves' and 'have nots' among the villagers. Those to whom the mining had made cash available were seen by the others as lazy and greedy, whose property should be damaged. Thus violence was justified under these social differences. Clearly, for Filer, although the mine has brought benefits, it has not compensated for their social and economic problems. Instead, it has created what he called the 'project dependency syndrome' where the local communities associate all their problems with the company.

Clearly, even the Lihir Project from the view of the Lihirians could still be improved. Filer (1998) outlined a number of issues:

- (a) leadership behaviour
- (b) perceptions of the mine
- (c) disappointment with the project
- (d) unpreparedness for mine closure.

Leadership Behaviour Despite the existence of local institutions that were set up for the negotiation and distribution of mine benefits among those entitled, leadership per se does not involve a democratic process. This is reflected in the finding that most Lihirians do not question or offer any public comment on the actions and words of those purporting to act on their behalf. The 'emerged leaders' seem to continue to act on behalf of the majority as if they were given a unilateral right to do so. While the members of the community may express disagreement with actions and words of leaders, there seems to be no way to show dissatisfaction with these leaders (Filer 1998: 9). The people seem to ignore the issues at hand or discussed at the time. Filer argues that this behaviour may be caused by a lack of communication. At same time, there is also the question of whether the people are actually willing to be involved in the issues at hand. Filer argues that this behaviour could be described as either passive resistance or active disengagement. This kind of behaviour allows the persistent actions of the minority actors to continue without knowing exactly whether they are given the authority to do so. This pattern of behaviour observed by Filer is important because not only does it allow a sense of minority rule, but also it shows that often the community may allow things although members are not happy with them. Thus, wider consultation alluded to in the 'Development Forum' may only be a reflection of self-chosen 'leaders' participation, and not necessarily the participation of the community. The behaviour described above is consistent with community attitudes to activities where they do not have direct ownership.

Perceptions of the Mine Apart from concerns about leadership behaviour, the Development Forum did not prevent a perception of the mine as being a 'traitor'. Filer identified the perception that Lihirians saw LMC's practices as inappropriate. This included concerns about its employment practices, local training and business development programs, and the distribution of other project benefits within the community. The community's response to this perceived 'slap in the face' by the

company justified the resort to forming resistance movements. In a sense, Filer was observing a return to the kind of responses that were in confrontation and were meant to be thing of the past, only found in earlier PNG projects. This confrontation as a result of grievances against the company was evident even as early as the exploration stage of the project. Filer rightfully concluded that 'Development Forum' agreements were no guarantee against landowners' grievances. Equally, it does not necessarily guarantee their compliance with their obligation to not disrupt the operation of the mine (Filer 1998: 11). Some of the major issues underlying landowner protests included maximising contracts for locals, risk allowances, noise, and accidental running over animals. These are mostly local concerns that directly affect landowners.

Disappointment Apart from direct grievances, Filer also noted a general disappointment with the Lihir Project. This relates to the expectation of the Lihirian community in general. According to Filer (1998: 13), most Lihirians' expectations from the mine were to accumulate wealth and live in a material surrounding no different from a moderately affluent Australian working class family living in suburban areas of Brisbane or Cairns. These expectations for a modern house, vehicles, and other commodities were central to the expectations of Lihirian community members. In fact, it may be argued, why should this not be expected? But as Filer observed, the LMC was alarmed at what they considered unrealistic expectations (Filer 1998: 14). They were baffled and puzzled that people wanted to suburbanise their villages. For the company, there was not enough money under the Village Development Scheme (VDS) to meet the expectations. For the landowners, the VDS was not just a housing scheme, while the company expected the villagers to simply improve the existing housing conditions and environment.

This is one of the main paradoxes of so-called development, including mining development. This disappointment is an important indication not only of the difference in the goals of the company on one hand and landowners on the other, but a crucial basis for why mining development will never meet landowner goals in this respect. This matches the point made by Connell, who argued that there had been hardly any evidence to suggest that indigenous development outcomes have been met as result of these mining development projects in Melanesia in general (Connell 1991: 70).

Mine closure The disappointment on the part of the landowners with the Lihir project will perhaps be intensified at the stage of mine closure. This raises the important issue of sustainable development, often equated as potentially achievable as a result of mining developments. According to Filer, the Lihirians were not even thinking this far ahead (Filer 1998: 17). The idea of finding a way out of the dependency created by the mine remains a remote prospect. Thus, the prospect of Lihirians returning to where they were, as subsistence villagers before the existence of the mine, is not possible since the environment would have been damaged beyond immediate recovery.

The Lihirian community is the most well-placed community in a mining project in PNG. It is expected that this will be perceived as a success story judged against other mining projects. First of all, they had the chance to learn from previous mining experiences in PNG, and in particular in relation to the practice of Development Forums as a mechanism for establishing a sound relationship between kin groups and the mine operators. They were small in terms of population, although this is not a unique feature to Lihir. The mining project itself is also a world class mine with the potential to have a great economic development impact. The opportunity of employment provision and the isolation of the islands from mainland PNG also allowed for the control of aliens. Therefore the forum could be more focussed on the decisions involving the community. But as we have seen from the observations described above, the Lihir project may well be another disappointment in the quest for development among Melanesian indigenous communities.

What seems clear is that although the Lihir project was one of the largest projects constructed and developed among a relatively small community, it has not successfully brought about development as envisaged by the local community. In a sense, it clearly indicates that many of the justifications for mining projects may be questionable in the first instance. In other words, there may be no relationship between the development of mining projects and the development of the local community. While the question of whether the local community should develop may be construed as not the responsibility of the project and the state, it leaves one to

wonder whether a mining project is worth it at all, where the long term interests of the community may be undermined.

3.7. Summary of cases

The PNG mining cases outlined above involved four major projects. These are the Panguna mining Project, the Ok Tedi Project, the Porgera Project and the Lihir Project. There are some major differences among these major projects as well as persistent features common to all the projects in relation to landowners' development goals (see table below).

Mining Projects	Location	Form of Agreements	Degree of Kin Group participation	Form of Articulation of Kin groups
Panguna Mine	Bougainville Islands in Papua New Guinea	Ratification by an Act of Parliament	Nasioi group Resistance To project	Extreme Instrumental Articulation
Ok Tedi	Top Fly River MainLand Papua New Guinea	Ratification By an Act of Parliament	Wopkaimin Kin group had Limited participation	Strong Instrumental Articulation
Porgera	Enga Province, Mainland Papua New Guinea	mining Agreements or Contract	Ipili participation through Development Forum.	Less strong Instrumental Articulation
Lihir	New Ireland Province.Islands In Papua New Guinea.	mining Agreements or Contract	Lihirian participation through Development Forum	Less strong Instrumental Articulation

TABLE 1: The pattern of gradual improvement of the relationship between kin groups and mine developers.

As listed in the table above, the four mining development cases in PNG are all large mining projects. They all took place among kin group communities both on the mainland and the islands of PNG. But what the above table shows is also the trend of the relationship with kin groups. This is reflected in the form of the agreements reached. For example, in the case of the two earlier mines of Panguna and Ok Tedi, the agreements were both ratifications. This form of agreement resulted in the extreme marginalisation of kin groups in the mining project. This has changed as shown in the subsequent projects of Porgera and Lihir, where agreements were in the form of contracts. However, while contracts were an improvement on the previous ratification, the goals of kin groups remain external to the aims of project development.

What the four major mining projects described in PNG suggest is that there is a consistency in the form of articulation predominant in natural resource development. The nature of relations over natural resource use has its roots in a social environment of cross-cultural contact in the early nineteenth century. Before the arrival of the Europeans, kin groups in PNG lived within the confines of their territorial area. There were of course social conflicts, which were common features of many human societies around the world, but even those conflicts were undertaken in the context of reciprocal relations. In other words, there was always the chance to reciprocate and restore social balance, even temporarily. This reciprocal form of relationship was not only expressed in conflicts but also in the non-conflict social environment. In PNG, kin group societies expressed reciprocal relations through mortuary feasts and marriages. These social institutions were based on a reciprocal exchange system, and as a form of relationship for human interactions, the benefits and the costs of such forms of interactions were within the reach of each player.

Forms of relationship had transformed for Melanesians when colonial states made contact and established itself in the nineteenth century. That is the relationship between kin groups and the colonial states. Following traders, explorers and the introduction of the state, kin groups were persistently engaged a form of relationship that marginalised kin groups and remains to the present day.

According to Sahlins, cross-cultural interaction involves foremost two different sets of actors with different worldviews. Both actors perceive each other differently because each defines the 'other' on the basis of their cultural disposition. Actors make choices in actions in pursuit of their desired goals. In structural analysis, this is where the role of sign becomes important. A code can be arranged and rearranged because such a code or sign may mean different things to different actors. Also, it is not only the fact that signs can mean different things to different people, but once such sign has been chosen it has the ability to self-regulate or reproduce itself. But most importantly, some goals take on greater significance than do others, and once established have the tendency to self reproduce.

What is relevant for our purposes here is that in the context of cultural contact between kin groups and Europeans, both parties saw the role of natural resources differently. On one hand, the European traders and settlers saw natural resources as important for exporting natural resources for the world market. This was the basis for wealth creation, not only for themselves as individuals, but also collectively for the home country of origin. The kin groups on the other hand, interested in the technology brought with traders. Thus the process of material exchange with kin groups in PNG, and later the imposition of the state, was a significant means for the achievement of desired goals. These goals of capital accumulation and economic growth were the basis for the relationship of Europeans with kin groups. The belief in the doctrine that use of force by the state was legitimate was an essential ingredient for the subordination of kin groups and their understanding of the relationship as based on reciprocity.

The state as an institution was a significant factor in the transformation of kin group relationships in their society. The state created instruments of law that set the rules, roles and values for relationship over natural resources. The state is therefore the basis for an instrumental relationship, and remained persistently so after political independence. The state became the structure that has self perpetuated itself over time and a major reason for kin group subordination in natural resource use.

This work argues that the material articulation of kin groups persisted in PNG since its inception in the eighteenth century until the present. The development of natural

resources in PNG reflects this form of relationship throughout. While more recently one could argue that there have been changes in attitude, the original goals of the state and commerce, which articulated kin groups in the first place, remain. The main four mining projects in PNG that are considered in this chapter reflect the persistence of instrumental articulation, especially when it relates to the collective goals of kin groups in PNG.

In each of the PNG mining cases outlined, the kin groups' struggles were consistent. In the case of Panguna Mine, the community did not support it in the first place during exploration. This resistance was controlled through the use of the state, especially justified under the law that governs mineral resources in PNG. The use of police and government officials to justify the actions of the company points to a stronger concern about the project, rather than the issues affecting landowners. The process of negotiation was also not completely supported. The use of ratification as the basis to operate the mine makes the Panguna Mine the most extreme case of landowners' interests being virtually ignored. While the landowners were paid compensation for damages and some nominal payment for lost properties, essentially the state and the mining company had their way. This situation can be glossed over with financial compensations and revised consultation with landowners, but the fact remains that the form of relationship is basically one of instrumental articulation at its extreme. The promotion of the laws of the state to landowners, the direct involvement of government officials, and ratification of the agreements, are the major indicators of this form of approach to relationship formation in developing the Panguna project.

The development of Ok Tedi mine was again to take the same form of relationship. The state and company were more interested in the commercial interests of the project than, say, the impact such activity would have on the people who live in the area. The Ok Tedi project was ratified and the state and the mining company justified decisions made about environmental issues as they saw fit. Both the Panguna and Ok Tedi Mining Projects were extreme examples of relationships where landowners had little influence on the issues that directly affected them. Both projects were disasters in terms of both social and environmental impacts on the local communities.

The result of the Panguna conflict, which resulted in the closure of the mine in 1989, was an evident demonstration that kin group issues were at odds with the goals of the mines. It has not been learned to this day that Melanesian customary land tenure will not accept, although may tolerate, the idea of the state ownership of natural resources. What seems to characterise the state approach to this issue of mineral rights has been to manage the tension over this issue. But this issue has surfaced consistently with the development of subsequent projects. The case of Porgera demonstrates the first time that the state and mine project were willing to discuss community concerns about the project. While such consultation mechanisms, which later became known as the Development Forum, progressed well, such progress has largely been process related. In other words, the major rules governing the project remain, and it was the processes that were now taken into consideration. Such incentives came in the form of carrying out certain actions, interactions and attitudes to the project that kin groups may see as including their concerns. But consultation with landowners is not a guarantee that landowners were an equal partner. This is because, as Duncan (1997) has pointed out, the company know-how about this particular industry was far greater than the subsistence landowners'. This asymmetrical relation in terms of knowledge about the mining industry makes landowner consultation far more an act of legitimising goals of the project that are already set. It is not a consultation to modify the goal of the mining project. Consultation with landowners then becomes a latent form of co-optation. The lack of modifications in the goals of the mining project to benefit landowners meant that there would be a continuance of indirect ways of trying to modify the project on the part of the landowners. While this may not be expressed consciously, the underlying perception that the resource belongs to the landowners allows this persistent strife. The co-optation of landowners into the scheme of mining project goals meant that projects tend to exclude the goals of the landowner community. The change in strategy on the part of the state and the mining company to consult with landowners, although useful, is not sufficient to change the direction of mining projects towards long-term improvement and development of the landowner community. There is the argument that kin group communities wanted a material focus which was a short term rather than long term goal. The argument that kin groups were more interested in short term material goods is valid, but only because this behaviour was promoted earlier as part of material articulation. There have been

limited discussions about ‘development of kin groups’ in early projects and even in the recent ones it has only been framed in terms of benefits.

Landowners were better coopted at Lihir, but it is hardly surprising to find that even in such a world class project with a small landowner community, the expectations of the landowners for a higher standard of living was seen as an unrealistic expectation from the project (Filer 1998:14). Mere consultation and dividing the fixed royalties into smaller packages do not constitute improving the share on the part of landowners, but merely gives an impression of a multitude of activities that will benefit landowners. This process approach may last during the life of the Lihir mine but it is doubtful that the same will hold for subsequent projects in PNG.

3.8. Implications for this Work

The chapter suggested that while the overall trend has been one of improvement of relationships, beginning with the most marginalised form to gradual inclusion of kin groups in mine developments, such improvements have been largely in terms of process. Structurally, the norms that govern resource relations, the roles defined for kin groups and the values used to justify the relations remain intact.

What is learned from PNG is that legal articulation of mineral resources formed the basis for justifying how that resource should be accessed. This legal articulation defined mineral resources as owned by the state, which dispossessed Papua New Guineans. This instrument was sustained through the use of force over the years for promotion of exploration, mining and exports of gold including other resources. This form of relationship is defined here as instrumental articulation, because indigenous communities were coerced as well as coopted into accepting the instrument of the state. Most mining development in PNG was sheltered from indigenous interference by legal instruments enforced by the use of force. After the Second World War, changes in international politics led to the notion of decolonisation and subsequent political independence of states, including PNG.

Since independence in 1975 there have been attempts to mould the PNG state to accommodate indigenous Melanesians’ dignity, rights, and self-determination. In mining development, the legal instrument that was put in place by the former state

remained in place, and despite attempts to sell the existing basis for relationship as fair, it remains a futile exercise in mining development in PNG. First, where mineral resources are owned by the state, it will never be considered as fair by those on whose land the resource is found. But instead of addressing this instrument of relationship, subsequent mining projects in PNG, in particular the ones examined in this work, focussed largely on the processes of mining development itself. This means that instead of changing the rules governing mineral ownership, emphasis was placed largely on improving interaction, improving attitudes towards mining and improving actions in mining projects that largely sustained the status quo of mine relationships.

In improving interaction, mining companies, and the state persisted with ideas of consultation, compensation, and other appeasement processes. The application of consultation process was a gain for the state and company, while it was simply an overdue process for any human relationship. In effect, the Development Forum process is the beginning step for developing improved relations with kin groups and not the end in itself for natural resource use. This is because there are issues that may further require consultation processes such as the instrumental law that defines ownership of mineral resources and the role of such projects in terms of meeting the collective development goals of kin groups.

The need to secure the collective goals of kin groups is vital for the nation building process. This is because the state intervention in kin group territories can reduce their ability to survive in the long term as a result of environmental and other social impacts brought about by such intervention. It requires a change in attitude, not only in the processes of engaging landowners for project development goals, but also changes in attitude towards the role of such projects for the long term development of kin group communities.

The companies emphasised ideas like the isolation of the local community, which meant that only mining projects could really help communities by investment. There was also the emphasis on the difficulty of investing in the area because of political insecurity. There was further emphasis on economic opportunities that the project will create, and most of all the national economy, which the state wishes to hear. While the reasons promoted by the state and company as to why natural resources should be

developed have merit, they are not reason enough for the kin group to sacrifice all it has for the whole nation when its collective goals as a community are threatened. This is particularly the case when it involves mining developments that in most cases threaten the environment upon which kin groups are dependent.

Activities chosen in development projects tend to meet project needs. These include hosting public relations feasts, ceremonies, and credit schemes. Credit schemes in particular are designed to promote the project as contributing to the development of the community in general. But where such credit schemes go towards roads and bridges, which by and large serve the company and the government rather than the landowners directly affected, such an activity meets the goals of the state and company more than it directly helps landowners. The case of the Porgera credit scheme demonstrates this, as more than 90% of the credit fund went to roads and bridges while the remainder went to schools, which would in contrast directly help landowners and their future generations.

Clearly, up until the present, mineral resource development in PNG has embarked on processes that support the goals of mining companies and the state. What it has neglected to include are the fundamental structures that underlie these processes. This includes, for example, the rules that were introduced to govern mineral resources and which define roles for players and values used in justifying the goals of mining projects. In the case of rules, the mineral laws that dispossessed landowners are at the root of relations in mining development in PNG. The notion of ownership of mineral rights must be accommodated within the Melanesian worldview so that the benefits of mineral resources can also be justified as necessarily for the good of the Melanesians. The importance of changing rules that govern mineral resource ownership rights is that this changes the configuration of benefit distribution from a compensation and appeasement mentality to one of development and benefit, which includes responsibility on the part of landowners.

Essentially the PNG cases confirm the suspicion in Solomon Islands that natural resource exploitation has so far not meet the expectations of kin groups. While processes in mine relations have improved over the years, the structural problems of articulation remain.

Chapter 4

Kin groups and the state: natural resource development

4.1 Introduction

In the previous chapter on PNG, the nature of the relationship between kin groups and mine projects showed gradual changes in the participation of the former. The forms of articulation range from ratification to contract forms in the agreements reached with kin groups for use of mineral resources in PNG. The roots of the forms of articulation were placed in the context of colonial transformation of kin groups through the formation and consolidation of the state. The relationship between kin groups and mine projects in PNG has reflected a form of relationship that is instrumentally articulated towards the goals of the state and mining companies more than for kin groups.

What Chapter 4 aims to show is a similar experience in the case of the Solomon Islands. It is about the form and practices of articulation that were used to engage kin groups in the Solomon Islands in the development of natural resources other than minerals. It describes the early forms of relationship in resources development experiences in Solomon Islands. Mineral resources development will be considered in the next three chapters. This chapter's focus is on the nature of forces that influenced the forms of relationship with kin groups over natural resource use other than mineral.

There were two important elements of historical change that influenced the subsequent nature of relationships with kin groups. First was the establishment of the state, which was a centralised authority that partially displaced the authority of local kin groups (Alasia 1997, Belshaw and Royal Institute of International Affairs 1950, Bennett 1979, Burt 1994, Coppet 1977, Crocombe and Tuza 1992, Elota and Keesing 1978, Hviding 1996a, Keesing 1992, Larmour and Tarua 1983). The second was the introduction of the ideology of tenure by the state for the purpose of accessing natural resources for the plantation economy (Allan 1957, Chapman 1963, Lakau 1996, Larmour 1987, Lasaga 1972). These historical structures influenced the nature of relationships kin groups have had with the state and commercial developers in subsequent years. This work argues that relationships with kin groups in Solomon

Islands under these historical structures were persistently instrumental in form and practice. In other words, the form of articulation of relations over natural resources was fundamentally to serve the interests of the state more than those of kin groups. It traces the early establishment of the state and the subsequent introduction of a new tenure system. These were aspects of the structures that guided the nature of relationships over natural resource use such as fishery, forestry and plantation agriculture leading up to independence and into the present. But before tracing the origin and patterns of relationship, first some consideration must be given to kin groups themselves and their specific forms of articulation.

4.1.1 Kinship groups

Before colonial powers were present in Solomon Islands, kin groups functioned as a social whole. Kin groups had developed structures and practices that were necessary for them to live and function as units. In Solomon Islands, linguistically there are about 61 major kin groups (Tryon and Hackman 1983). However, these social groups shared many things, including physical features as Melanesians and a shared linguistic ancestry like Austronesian or Papuan. They even shared land and marine tenure systems (Allan 1957, Bennett 1979, Burt 1994, de Coppet 1982, Hviding 1996b). At the social group level, language and culture are shared. However, within the social group there are further subdivisions defined largely in terms of kinship in relation to a specific territory. A recent work by the anthropologist Hviding showed that among the Marovo Islanders, land known as puava was under the custody of kin group units known as butubutu (Hviding 1996b). The importance of the association of kin groups with a specific territory is widely shared throughout the Solomon Islands. For example, even in the distant eastern part of Solomon Islands among the Are' Are of Malaita, these territories are also recognised and known as arata (De Coppet 1982). The same is found among the Guadalcanal people of the Central Highlands among the matoba, where land territories were under the kin group unit within the larger unit of moiety (Naitoro 2000; Roe 1990). Although each social group varies in the way that land is organised, they all share the common feature that each territory is associated with a specific social group. The assumption then was that such social group has the general rights of decision making over the particular area. Generally, it is now

commonly accepted that territories were usually associated with specific social groups (World Bank 1991).

It was this form of territoriality that was predominant before the introduction of the centralised state that triggered a new form of relationship over natural resources within these kin group territories. Prior to the introduction of the centralised state, kin groups had their own forms of relationship for resource use, not only within their specific territory but also between territories. This was, in effect, a method of sharing resources. For example, in the use of young trees and vines for construction of their huts, kin group members often shared their resources. But some resources were not so easily shared, such as specific reefs for fishing and fruit trees adopted by a family (Hviding 1996b). Sharing resources was part of a wider form of relationship promoted in society. That was the idea of reciprocity not only between individuals but also between groups. Kinship ideology was the basis for social relations that guide exchange systems in society (De Coppet 1982). The moiety systems of matoba society in Guadalcanal were an example of the reciprocal expectations between the two moieties of a society. The idea was that society was divided in half and each half reciprocates with the other half based on 'small sister'/'big sister' relationship (Naitoro 2000; Naitoro 1993). In other social groups, such relationships were reciprocated between different alliances that may have been formed as a result of the exogamous marriage system. Thus kin groups, prior to the introduction of the centralised state, were largely operated on kinship ideology.

This kinship ideology was soon to undergo a process of transformation that resulted in the formation of new forms of relationship with kin groups over their previously held territory.

4.1.2 The centralised state

A centralised state was a new idea to kin groups because they largely confined their interests to a specific territory. This is in contrast to the idea of a centralised state, which encompassed a larger territorial area. The centralised state was not formed in a vacuum. It was a part of a larger process that became dominant in the twentieth century (Bernstein 2000). The process had come to include many nations (Wallerstein

1974), and Solomon Islands was just one of them. In 1893, the Solomon Islands was declared a protectorate of the British Empire (Allan 1957). Thus, although insignificant for the British Empire, the Solomon Islands became part of a world wide network of development activities within which indigenous community members were articulated.

As the state became more entrenched, it introduced policies, in particular in relation to tenure, for commercial activities. Thus, the continued use and exploitation of forestry, mineral, fishery and agricultural resources had persistently engaged kin groups (Bathgate 1993, Bennett 1979, Chapman 1963, Chief Secretary 1964, Crocombe and Tuza 1992, Dauvergne 1998, Fitch 1971, Hughes 1988, Larmour 1989, Lasaqa 1972).

4. 2 The state and the plantation economy

4.2.1 The state

The state was not an end in itself. Its formation was in conjunction with the need for commerce and world trade. Firstly, the state became an important basis for which commerce was then introduced and facilitated. The colonial land reforms that followed the declaration of Solomon Islands as a protectorate was a case in hand (Allan 1957, Belshaw 1950, Bennett 1979).

The origin of the state in Solomon Islands can be traced to 1893 when the Solomon Islands was declared a protectorate. This declaration made an area into a 'property' of the colonial power. Onward from the fourteenth century, many of the explorers were in search of new land for the expansion of European commerce and trade. Gold was especially central to these world explorations. In the sixteenth century the Spanish explorer Mendana was the first such explorer to 'discover' the islands, and had also renamed them (Allan 1957, Jack-Hinton 1962). But these explorers had a limited effect on the islands, apart from giving names. The central basis of the transformation of the relationship began in 1893, when the islands were given the status of a British Protectorate. It was soon after, in 1896, that the first resident commissioner Woodford was appointed by the British Government to administer the territory (Allan 1957).

By this time, the trade in labour that had been in place since the middle of the century had declined. Kin group members had experienced the effects of capitalism in Australia, Fiji, and Samoa as a result of labour trade in the previous decades. While the ethical aspects of the labour trade practised during this time were unsatisfactory, one of the unintended consequences was the indigenous community's desire for what they considered better work tools and fire power (Corris 1970). Following the declaration of the islands as a protectorate in 1893 (Allan 1957), the labour trade declined considerably, especially outside the Islands. The establishment of a Resident Commissioner in 1896, saw the beginning of centralised control in the territory. This was the development of the British Solomon Islands Protectorate. Thus, the process had begun for the introduction of capitalism and capitalist enterprises which set the process of interaction on course with the indigenous community ever since. For the colonial government, it was the process of civilising the natives and the development of commerce (Bennett 1979, Bodley 1990, Coppet 1977, Naitoro 1993, Scarr 1979). This was the notion of modernity, which spread throughout the world through the colonisation process (Bodley 1990). For the indigenous community, lack of unity in the first place meant varied experiences with modernity. But at the same time, some indigenous experiences were shared to a relative extent. For example, the establishment of the colony's administration in 1893 had two significant general outcomes. First, was the displacement of indigenous leadership structures through the establishment of the state administration (Naitoro 1993). Second, land policies weakened indigenous control of land and resources (Larmour et al.1979, Lasaqa 1972). In the case of the displacement of indigenous structures, many traditional leadership structures declined or were outlawed.

The introduction of a system of indirect rule in the 1920s, known also as the 'headmen' system, became the significant basis for displacement of kin group leadership structures. The colonial government was able to set up the administrative framework for indirect rule which divided the islands into four geographical regional areas known as districts. These were the Eastern district, Malaita district, Central district and the Western district. Each of these districts was further divided into sub-districts and thus the framework for the state control was put in place. In each sub-district, there were headmen as well as 'village headmen' for each village. In this organisational structure, the Resident Commissioner was at the apex of the pyramid

with four District Commissioners and District Officers. Non-kin group members occupied these higher levels of decision making while the district 'headman' and 'village headman' were mainly kin group individuals who had some exposure either as church members or former labourers in plantations (Allan 1957, Elota and Keesing 1978, Naitoro 1993). It was through this system that the administration was able to operate government policies in Solomon Islands from the 1920s until the Second World War in 1942.

The above system of government not only displaced kin group leadership but was also the major instrument used to establish relations with kin groups for the purpose of implementing government policies. On one hand, this was useful for bringing law and order into the colony, but on the other it displaced the kin group sense of identity and purpose. One of these important policies was the introduction of the doctrine of tenure for land use at the time for the plantation economy (Allan 1957, Lakau 1996, Larmour 1987, Larmour and University of Papua New Guinea Land Studies Centre 1986, Lasaqa 1972).

4.2.2 The plantation economy

Apart from the resulting displacement of leadership, the second outcome was the displacement of land ownership rights from the indigenous community (Larmour 1987, Lasaqa 1972). The economy was a central aspect of the state, which depended on it for its revenue. Thus the introduction of the doctrine of tenure in the early twentieth century was important for the state. The ideas of freehold and leasehold were used to allow much of the fertile land in Solomon Islands to be acquired for plantation agriculture (Allan 1957, Larmour 1986). Thus, while the administration introduced policies that were seen as necessary for the development of the new state, the same actions were seen by kin groups as a circumvention of their rights of landownership through an introduced concept of "waste" land policy (Allan 1957, Lasaqa 1972). For example, as a result of this policy, it was reported that by 1906, Levers Pacific Plantation Ltd was in control of most fertile land throughout the country, constituting 200,000 acres in all (Lasaqa 1972: 33). By 1956, 90% of the coastal fertile land was appropriated by planters and the administration. This amounted to about 6% of total land in the country (Allan 1957:60). Much plantation

activity was suspended during 1940-48. However, by then, most of the fertile land had already been appropriated for plantation activities and Guadalcanal island was one of those heavily affected by this policy. Between 1886 and 1920, the colonial government and traders were in possession of 22,720 acres of land on the plains of Guadalcanal (Lasaqa 1972: 29).

The sense of loss of control by kin group leaders and the subsequent loss of land as a result of land reforms benefiting the plantation economy were the causes of long standing grievances that lasted until the Second World War. This was in effect the result of instrumental articulation. These introduced structures and the doctrine of tenure were fundamentally to serve the goals of capitalism which though beneficial in creating labour opportunities was seen as unjust and had been marginalising to kin groups' interests.

4.2.3 Social resistance

Following the Second World War, there was some resistance from Solomon Islanders about, the loss of political control and loss of land on which kin groups were largely dependent. Two of the most generally known examples of resistance were the Maasina Ruru and Moro movements (Allan 1957, Davenport and Coker 1967, Elota and Keesing 1978, Keesing 1992, Laracy 1983, Naitoro 1993). The two occurred in sequence. The Maasina Ruru Movement started in 1943 and was subdued by 1951. The second was the Moro Movement, which started in 1957 and has remained active until the present. This movement will be dealt with later in the thesis. But the story of Maasina Ruru had features of what is often described as a 'Cargo Cult' (Crocombe and Tuza 1992, Laracy 1983). An important goal of the movement was about self-determination and re-exertion of kin group independence (De Coppet 1982, Naitoro 1993). For the state, this was a rebellious movement that had to be subdued.

From the perspective of many indigenous Maasina Ruru followers, it was a counter 'philosophy' to what they conceived as an asymmetrically existing form of relationship under the colonial administration. The Founder of the Maasina Ruru, Joseph Nori, became a founder, not because he developed the idea, but rather the idea was already around and he was the instrument for its expression. He had not

intentionally decided in 1943 that he was going to start a movement. The idea had already been around the Are' Are people, due to what they saw as an unfair relationship between indigenous members, the government, and the plantation owners. 'Maasina Ruru' in Are' Are dialect referred to a form of relationship seen then as an alternative to the existing master/servant form of relationship perceived as predominant at the time. 'Maasina' in Are' denoted a kinship relationship as 'cousin' brothers. Implicit in this concept Maasina was the mutuality of expectations between cousins, the reciprocity expectations which the Are' Are society claimed as the ideal form of social relationship in their society. The second word 'Ruru' has two meanings in the Are' Are dialect. The first is that of 'ruru' in the sense of 'collective purpose'. The word 'ruru' in this sense was used in other contexts as 'ruru manu', which refers to hunting birds for collective purposes, and is also used in the context of 'ruru hanua', which refers to collective destruction of the land. The same term is used in collecting insects as in 'ruru napo'. Therefore 'Maasina Ruru' meant in this sense 'cousins in collective purpose'. The most commonly used meaning by many social scientists was 'ruru' as corruption of the English term 'rule' (Allan 1957, Laracy 1983). In the Are' Are dialect there are words which seem familiar and tend to indicate shared meaning, yet have no direct linguistic linkage. For example, in English, the word 'Man' is phonetically close to the Are' Are word for man as 'mane'. Similarly, the Are' Are word 'Arete' which means good, resembles the Greek word for good life 'Arete'. The point is that Maasina Ruru was a counter perspective of an ideal relationship, which they believed was absent in the existing context of the relationship between kin groups, the state, or plantation owners at the time (Naitoro 1993).

The notable figures in the Maasina Ruru movement were Joseph Nori and Alick Nono'ohimae. They were both experienced in working for the former planters, although they did not share the same kind of job. Alick Nono'ohimae had worked as a labourer. Nori also worked as labourer, but in addition he was a cook. He started as a young man, living with an English couple in Tulagi. He cooked, child sat, and learned about European culture. Nori was one of those Islanders who observed European culture from a point of view of their daily family life in the Solomon Islands. Being young also meant that Nori was also able to learn the English language better than many Islanders of his time. Joseph Nori's experience shaped his views of the Maasina Ruru movement, when he spoke of the need for local lawyers, economists, and

political leaders. Alick Nono'ohimae, on the other hand, was most concerned with labour conditions because he had worked in plantations before the War. Nori was convinced of the need for self determination after his encounter with an American marine popularly known as Captain Wall. That was the idea of liberation and struggle for independence and self-rule. Thus Maasina Ruru in Are' Are dialect, refers to this 'collective purpose of the cousins'. The idea was a direct opposition to the kind of relationship in plantation activities where there was very little reciprocity. The labourers laboured and were paid very little and lived very differently to the plantation owners who demanded to be called 'masters'. In the Maasina understanding of human relationship there is no master, but instead distinct groups that negotiate relations through reciprocity. The Maasina Ruru movement was the ultimate demonstration of dissatisfaction with the existing structure of the relationship between Islanders on the one hand, and the state and capitalists on the other. During the 1950s, when the movement subsided and the Malaita Council was established in 1951, there was clear indication that conditions on relationships over land and working conditions in the Solomon Islands were unsatisfactory.

Although the movement had subdued, the internally promoted idea of documenting customary land persisted until the present, based on the idea of the 'collective purpose of cousins' land must be collectively owned and shared, and both males and females should have equal rights. The result of this idea of documentation of communal land led to emphasis on documenting kinship and genealogy in Are'Are. The Maasina Ruru leaders in Are' Are defined major areas of development that were desired. This included rights to the sea, rivers, space, land, medicinal plants, religion, knowledge, laws, economics, political leadership, women's rights, and kinship systems. These twelve categories of social development were known as 'taraewa' among Maasina Ruru followers. For the Are' Are, their views were that there must be a better form of interactions between people. These 'taraewa' were counter-ideals against those desired from the state, but were seen as impossible to acquire under their existing relationships. The central idea behind the Are'Are view about land was to show the importance that exists between man and his land in Are'Are (De Coppet 1982).

The implications of such a resistance movement were rooted in the culture of the people and indigenous notions of rights. These were clearly perceived inequalities in

the relationship between the indigenous community and the state and corporations. This form of movement was not confined to Malaita and Guadalcanal, but there were similar, though less visible, movements in the Solomon Islands. The result of these movements, was greater consciousness about indigenous rights during the post world war development activities.

The effect of the war and the new social movements were contributing factors to the subsequent sluggish development of natural resources after World War II. While the administration attempted to set up resource development projects that would sustain an emerging independent state, such attempts were restricted because these projects were quite marginal, and attracting investors was difficult. The second reason for a sluggish return of development was that kin groups were not in a position to support further projects because of their experiences in the previous years. They saw the state activities as acting against them rather than for them, because of the way leadership and land use were administered. The result of the post-war condition was different for both the state and kin groups. For the state, managing the resources was the key for the future development of Solomon Islands. For the landowners, it was about the relationship over natural resources rather than the exclusive goals of the state.

The development attempts described in the next sections demonstrate some of the features of the relationship between kin groups and the state over non-mining natural resource development during the post-war period.

4.3 Forestry development

Following the war, entrepreneurs who had left during the occupation of the Japanese returned. But there was a shortage of mineral explorers (Grover 1958) and plantation labourers. This labour shortage lasted only for a short period, and then labour recruitment started to flow again to plantation areas, especially outside Malaita Island. This was after the Maasina Ruru was subdued and the first Malaita District Council was established. Then reality in the Solomon Islands began to be perceived. The administration still had to run the territory with a limited financial subsidy from the UK. This put pressure on the territory's administration to find means to secure income

for government revenue. One of the options was the development of the forestry sector in the territory.

Forestry development was one of the important natural resource developments facilitated after the Second World War in the Solomon Islands. The intention of the Colonial Office in London was indicated by a Colonial Office dispatch dated 28 October 1944. It stated that:

The future forest policy will need to be based on the broadest grounds of the long term interests of the protectorate (Trenaman 1962).

The idea was that forestry resources of the protectorate should be harvested properly and not 'mined'. It was expected that the protectorate forest should be 'scientifically managed'. It was argued that any alternative approach to scientific management for short-term gain could easily follow those procedures normally followed by mining. This included the process of encouraging private prospectors, then granting of rights to exploit the resource as speedily and exhaustively as possible.

However, the establishment of a forest estate necessitated the creation of a forestry department. The importance of this approach for the British Solomon Islands Protectorate was reflected in the appointment of the first Chief Forestry Officer (Mr. J.W.P. Logie) in 1962 (Trenaman 1962). There were two concepts that were promoted at the time. These were the ideas of productive forests and protective areas. The latter was to declare areas identified as protective forest areas, while the former was for the development of productive estate. The idea was that of harvesting the forest to contribute to the economic development of the protectorate. Thus, by 1957 the major concern was the need to secure forestry estate so that it could be exploited.

The notion of forestry estate refers to an area of land dedicated legally and for a long-term purpose of forestry use. By 1960, the government implemented the policy after the Government House meeting on 15 July 1960, where the agreement stipulated the following:

- the preservation of forest cover in important catchment areas;

- assistance in conservational use of land not under continuous forest cover;
- conservation and sustained yield management of forests;
- to provide for internal requirements;
- for export production- primarily if use of land in this way can be economically justified;
- controlled timber exploitation of tracts not destined for inclusion in the eventual forest estate (Trenaman 1962).

Having the above policy put in place, the government was convinced, as a matter of course, that the state would be in control of the forest estate. In other words the question of ownership was irrelevant in so far as the government was concerned. It was generally accepted as a standard practice in less developed tropical territories of the British Commonwealth that the state would naturally own and control the forestry resource. This was largely the basis for interaction with indigenous landowners on forestry issues in the Solomon Islands.

The other dimension of the policy on forestry development concerned the land policy. The review of land policy in 1957 meant that any forestry estate creation had to wait until this review was completed. The Lands Commission report on customary land tenure in the territory, done by the then administrative Officer Colin H. Allan (Allan 1957), recommended options for legislative arrangements:

- to devise a customary land code that will be based on reconstruction of custom as it existed in 1893;
- to devise a policy to extinguish customary system of tenure;
- to do nothing about it.

A fourth option was favoured over the above three, which recommended that a legislative arrangement be carried out

to devise a policy which takes into account the present continuing need for the customary system, but which at the same time guides it along progressive lines towards the emergence of a modern tenure system based on adjudication and registration of individual title (Allan 1957: 277).

Following the land review study, the land and titles regulation was enacted in 1959 based on adjudication and registration of individual titles. The process was largely a strategic policy for the state ownership of land and individualisation of customary land tenure. The legislative framework on land allowed the subsequent enactment of the Forestry Regulation in the middle of 1960 (Trenaman 1962). The land regulation provided the basis for government establishment of forest estate in the protectorate.

4.3.1 Vangunu

The first indication of the implementation of the forestry policy was in 1963, in correspondence from the Chief Forestry officer Trenaman to the Commissioner of Land regarding the land acquisition of Vangunu Island in the Western District of the territory. The memorandum written to the Commissioner of Lands regarding negotiating the acquisition of Vangunu, authorised the Field Forest Officer (Chapman) to talk to the indigenous community at Vangunu about the government's intention. He was given instructions and guidance as to how he should approach the indigenous landowners in explaining why the government sought public title of Vangunu Island. The state in this case proposed to acquire 120 sq miles of the Island, and had used the churches, both the SDA and Methodist Missions in Marovo to break the 'ice' with the local people. Preliminary talk was done with Pastor Holmes of the SDA Mission Batuna and Rev. A.N. Vula of the Methodist Mission, Segi, before preliminary talks were opened with the Vangunu people (Chapman 1963). Clearly, in these land deals the church was an important part of rationalising government policies among kin groups. The headman too was an important local player as headmen were usually expected to be at those land negotiation meetings. As in the Vangunu case, Chapman reported that efforts were made to contact the Marovo Council but members were scattered and not able to attend, though the district Headman was present in meetings held between 10-15th February and 20-21st February in 1963.

In Vangunu, there were three major landowning groups. One category of landowners affected were the Bopo, Saira and Nineveh communities. The second category was that of Viru-Chakope Kineo (of Chakope) and Kuku (of Vura) who were another set of landowners. The third category was of individuals such as Monambusu (Hende and

Utah) and three individuals from Chea (Namasu and his sister Silala). The state had several meetings with these communities on several occasions before the government put forward its 'offer' for the landowners to sell their land. But usually before any offer was made, as in the case of Vangunu, the state sought agreements on principles and then verified the land of interests on the ground. Thus the government put forward the land acquisition offer for Vangunu to the Bopo, Saira, Vura, Chakope, Monambusu, Gepae and Chea communities.

4.3.2 The government proposal

The government's proposal was paternalistic. This behaviour was also observed by other commentators on resource development in the Solomon Islands (Larmour 1989). For example, in a report by the Forestry Field Officer, Chapman reported that assurances were given that the acquisition of forest estate was for the interests of the Vangunu people. It would have no effect on their community and land would be made available to them elsewhere in the future (Chapman 1963). In addition, their hunting lifestyle would be allowed to continue. The government was not only paternalistic but also devious and manipulative in appropriating the Lands and Titles Ordinance of 1958 and the Land and Titles Regulation of 1959 to facilitate public ownership of land in particular, knowing that customary land was collective and that such major land policy changes required consent.

In the case of the Vangunu forestry development incentives, the government had made its own policy and conditions, which were then carried out by getting landowners to understand and participate. For example, the state had already put forward the following conditions.

1. a forest estate should be created on public land and that freehold title be secured;
2. areas of considerable stands of timber should be declared Forest Reserve;
3. that desired total area of forest estate should be identified within the given Islands:
 - Baga Island
 - Rob Roy Island
 - Wagina Island

- Vangunu Island
 - Tetepari
 - New Georgia,
 - Rere, Guadalcanal
 - Allardyce Harbour, Santa Isabel
 - Lilia, Santa Isabel
 - The Shortland Islands
 - Santa Cruz
 - Vanikoro
4. those priorities for acquisition should involve Vangunu and SE New Georgia.
 5. the idea was that landowners should be persuaded to agree to compulsory acquisition of their land or alternatively to a fixed term lease of 99 years;
 6. that after the government acquired freehold title to land for forestry, there would be no sale price negotiation; instead the government would pay them a percentage of the royalty that the government obtained from exploiting as ex-gratia payment. This was 10% of the royalty negotiated with the exploiting company.
 7. the price to be offered for improved land was to be rated at 6d. per acre;
 8. that the above conditions would apply to subsequent land acquisition for forest estate in the protectorate.

Given the conditions listed above, landowners were not always happy with the deals. This was reflected in a letter from Jim Kinio, one of the Vangunu landowners, writing to the District Commissioner in July 1964. Kinio wrote:

On behalf of the owner at the land of Vangunu which was taken by the Forestry department, mainly the land between the Sagivi river and Gevala river. I would like to ask this question. What is the purpose of all the departments under the control of the Government here at Solomon Island? Answering of that question we believed that you are here to help us. And if so why is the Forestry Department appointed to pay our land at less amount? (Kinio 1964)

It was in response to the above letter that the Senior Secretary to the District Commissioner, (Western) Tony Hughes wrote to the Commissioner of Land (Hughes 1964). In his letter, he suggested that the people in Vangunu (Vendors) were not happy about the sale. This was because of what they considered to be the loss of their

land for gardening and security. The other reasons included the payment of 2,000 pounds for the Island as being too cheap, and that the forest exploiting company would be getting a disproportionate share of the economic value of the forest (Hughes 1964). In response to these concerns, the Office of the Chief's secretary dismissed these issues and instead chose to go along with the surveyors' perspective on the whole Vangunu issue. The surveyor, Mr. Cross, dismissed the three points raised by Hughes and wrote:

'..I am very much afraid that the purchase money will in fact drift into the coffers of the next few Chinese traders to visit the area. None of the vendors appeared to have any ideas in mind for the banking or investment of funds, establishment of a co-operative, or any other venture.... As will be seen from my adjudication proceedings when they are completed the disputed area of land is clearly vacant land within the terms of Cap.56. I am fairly certain that this applies to at least 80-90% of the total area of the acquisition. Even if the vacant land provisions did not exist, I do not consider that the vendors could, on any reasonable basis, establish a claim to ownership of any but small parts of the land (Cross 1964).

Thus the issue of the Vangunu land purchase was put to rest by the authorities. There was a number of issues considered relevant in trying to understand the relationship between indigenous people and the state. The first issue was that of a lack of information on the part of the landowners. In the case of the Vangunu landowners, this showed that there were differences in information held by the older generation and the new generation, as indicated by Hughes' account (1964). There was also a sense of coercion implied by Hughes' observation about why the landowners, though unhappy about the deal, were letting it go anyway (Hughes 1964). The state's overbearing presence in this deal has shown that the state had its way in most deals with kin groups and this was largely out of fear of the state's use of force rather than on the basis of rational justification. The account by Mr Cross implies degrees of prejudice against the landowners in his suggestion about their behaviour and use of money and overt attempt to justify non ownership of land on the part of the community. Thus it is obviously that form of articulation was coercive and instrumentally biased against kin groups in forestry deals.

Yet for the state, in terms of forestry development in the Solomon Islands, Vangunu was considered the model for dealing with community in acquisition for land for

forestry estate. The decision made in 1962 under the High Commissioner was central in the attitude of the state towards forestry development in the territory (ASNR 1962).

4.3.3 Land sales and stumpage

The benefit that landowners gained from this period of forest development was marginal. Benefit for the people was seen more on the basis of establishing the state and its economy rather than benefit for the people directly affected by the forestry and land policy. The government's acquisition of land for forestry exploitation was compensated by government offers and stumpage payment.

Natural resource development in the Solomon Islands after the Second World War was not confined to Forestry. There were other development approaches. These involved mining, fisheries, and agricultural and further forestry development. Problems in this area were first manifested in the early coconut plantation developments in the beginning of the twentieth century. After the Second World War, exploitation of forests became the central focus for which natural resource development relations became significant, in particular in the process of governments' land acquisition policy for the exploitation and establishment of forest estate. The emphasis on forestry was apparent in the post war period and more so after independence. However, in the late 1960s, and subsequent decades after political independence, more natural resource development was carried out. These experiences are outlined in the following sections to establish the nature of resource development relations and to show how indigenous communities continue to perceive their role as marginal, and their interests as unaccounted for. The natural resource development projects considered here include Kolombangara Forestry Products, Rennell Bauxite development, Noro's Fishery's development, North New Georgia Forest development, and Guadalcanal Plains development.

4.3.4 Kolombangara

During the 1960s, Kolombangara Island was one of the target areas for establishing forestry estate. It was considered the second most important priority area after Vangunu Island. But at this time, the concern of the Government was to acquire the remaining customary land area left to the Kolombangara people following Levers Pacific Plantation Limited (LPPL) acquiring more than 50% of the island's area in the 1920s. This was to establish three coconut plantations (Lady Lever, Vila, Karekana) on 2,133 ha in south and south east Kolombangara. As a result of the process of land acquisition for forestry exploitations in the 1960s, the island was heavily logged during 1968-78 by Levers Pacific Timbers (LPT). Most of the revenue from the logging never went to the Kolombangara people. By the middle of the 1980s, the island's 13,000 ha of logged land were considered as appropriate for the development of a forestry plantation. The idea this time was for the newly independent state of the Solomon Islands to establish a joint-venture project with a foreign investor, namely the Commonwealth Development Corporation (CDC). Thus, there was the establishment of the Kolombangara Forest Products Limited (KFPL).

Landowners in the western side of the island refused Levers Pacific Timber logging in the 1970s, and were also sceptical about the proposed joint venture project (KFPL).

4.3.5 Kolombangara forest products limited

Kolombangara is a volcanic island among the New Georgia group in the Western Province. The island is circular in form and has a land area of 685 sq km. The top of the crater is 1,760 m above sea level. The island is one of the more fertile land systems in the Solomon Islands (Wall and Hansell, 1975). This includes the Patupaele, Ringgi, Londumoe, Serambuni and Lamousa land systems considered relevant for development. The establishment of the Kolombangara Forestry Products Limited (KFPL) joint venture project was for reforestation on 13,000 ha of logged land. The idea was to carry out reforestation by introducing fast-growing hardwoods on the land. It was possible for the post-colonial government to establish an operating company (KFPL) as a joint venture between the Solomon Islands government and CDC on the Land. This was because 77% of Kolombagara (52,746 ha) was alienated

land, which was initially classified as vacant under the Wasteland Ordinance of 1893 and was allocated (in part) to LPPL. The customary landholders have disputed this classification since the early 1900s, claiming that the land was theirs. Most of the land remains with the government and is leased to this joint venture project. That is, the 25,000 ha of Government land were leased on a 75 year lease to KFPL. To canvas the support of the local Kolombangara people over an issue of land that has not been settled since colonisation, the 2,133 ha of land used for coconut plantations a century earlier has now been leased on temporary occupation license (TOL) to the locals to establish smallholder projects. The idea was to convince them (the Kolombangara local community) that this time the KFPL project was in their interest.

In 1986, Levers Pacific Timbers withdrew from its logging operation. The Solomon Islands government and CDC became engaged in the formation of the joint venture company KFPL. The reforestation project would produce hard tropical woods on government-held land. The idea was to plant 25% of the land with *Gmelina arborea* and the remainder with *Eucalyptus deglupta* for hardwood chip and hardwood sawn timber. In this proposed development, it was expected that an integrated sawmill and wood chip plant was to be constructed at Ringgi Cove by 1997/1998. The planned processing plant was not built. The reasons given were that despite the planting of 13,000 ha of forest and an additional forestry estate inheritance of 9,000 ha, these were considered insufficient to support the plant (interview with Gordon Darcy Lilo). There was also further demand for forestry acquisition of Viru estate, which the Government decided to give to a Korean logging company, Eargon Resources Limited. Thus KFPL now effectively functions as a logging company in exporting logs from these plantation estate. The joint venture company had been expected to operate commercially, with collaboration from the central government and the provincial government, but with limited public intervention. It was expected to employ 800 employees, both skilled and unskilled. The company would have reached peak financing costs of SBD\$ 284.3 m in 1998. It was expected that the project's financial internal rate of return (FIRR) would be 9% in constant 1988 terms. The economic internal rate of return (EIRR), in which the financial flow is adjusted for the economic costs and benefits, was 14%. The project had expected to gain foreign exchange inflows in excess of SBD\$30m per annum from the year 2000 onward.

But with the woodchip plant no longer in place and the result of the current social conflict in the country, the KFPL project may also be forced to fulfil the suspicion of the Kolombangara people as another failed government project. Clearly, the future of KFPL on Kolombagara remained insecure. For the Kolombangara people, now numbering more than 5000, some of their expectations remain to be seen. They had held expectations for the benefit for their families, employment, market outlets for local food, roads, schools, clinics and water supplies for the whole island. These benefits were expected on the basis of the success of the project. These expectations too may now remain unfulfilled.

The Kolombangara case was one of forestry exploitation, which spans many years. Starting in the beginning of the twentieth century, land was acquired for coconut plantations against the wishes of the people. Then the subsequent interests in forestry resource development after the Second World War further exploited forest resources until the 1980s. The independent state of Solomon Islands maintained the use of the land in commercial activities until the present. But the landowners' grievances about the land remained and this issue has yet to be resolved. In the meantime, benefits for landowners had shown little on the ground among the Kolombangara population. This situation had made landowners like Gordon Darcy Lilo suspect that perhaps the KFPL venture's motive was more of an environmental project than a commercial development project, that is, a reforestation project rather than commercial forestation project. Therefore, resource development relations in the context of Kolombangara remain the domain of the state and the forest companies involved, and landowners were expectant beneficiaries rather than active participants.

4.3.6 Small holder project approach

In contemporary forest resource development, the improvement of relationships over benefits was justified on the traditional grounds of employment, and provision of services for the local community, but now included ideas of small holder project development. This was seen in the case of Kolombangara as a means for greater participation in the cash economy. But ideas and practice did not always go hand in hand. Small holders' projects, if they were to be successful, required both human and financial resources. This condition could not be met locally and required external

input of human and financial resources. It was found to be uneconomical because the cost of repayment of capital, which included finance to bring in external human resources, far outweighed the production value of the small holder scheme. This clearly made local participation in the cash economy much more difficult.

In effect, like land sales and stumpage benefits in the previous decades, even in contemporary resource development local participation was marginal. Landowners remained silent observers of project developments that directly impacted on them and reduced their resource potential for the future. But this trend remained after the periods of 1960s and 1970s. Another similar project, although with different resources, was the Rennell Island Bauxite Development. This mining development project was one of the earliest of its kind in the Solomon Islands.

4.4 Mineral resources

4.4.1 Rennell bauxite development

Mineral resource development in Solomon Islands will be described in more detail in the next chapter. It suffices to mention here that despite numerous explorations for minerals, there was not any active mining until the Gold Ridge Mining Project. The closest to any mining in Solomon Islands was in the case of Rennell Bauxite trial mining. This trial took place after the Second World War when the state attitude towards mining was simple. The role of the state in mining was generally to encourage investors, give them the license, and expect them to exploit the mineral as speedily as possible. An early example of this policy was the issuance of the 1937 mining license for Gold Ridge, which did not eventuate as the result of the war (Grover 1955).

In the case of Rennell Island, the bauxite deposit was found in the 1960s on an upraised coral atoll. The prospecting license was issued to Mitsui & Smelting Company Limited of Tokyo in 1969 (Larmour 1989:56). Mitsui & Smelting submitted a mining proposal in 1970 (Fitch 1971: 1). The Solomon Islands government gave it favourable consideration, but the first approval was for a trial operation and additional technological investigations. This was to ascertain economic viability and the possibility for infrastructure development, in the way of establishing

an alumina plant. In 1970, the colonial government negotiated what it considered as "surface rights" of customary landowners, in areas where bauxite deposits had affected their food crops etc. (Fitch 1971: 2). Mineral resources policy under the government only recognised surface rights for landowners, and not the mineral resources itself. This mineral resources policy remains in the present Mines and Minerals Act (Mines and Minerals Act 1990). Again as expected, kinship communities remained secondary features of such projects. For example, the Fitch Report devoted 99% to technical aspects of the bauxite project, while only two paragraphs dealt with the Rennell Islanders. Social mapping, as known today, was obviously not in practice. Instead, the emphasis of the government was largely on negotiating the surface rights and Islanders' relocation away from the mine areas (Fitch 1971: para.1.01 and 6.08). The rights of kinship groups in terms of land were marginalised to obtain surface access to the mine. Larmour observed the deficiency in the approach to indigenous communities, that when the project was aborted it at least taught the administration that landowners should have been consulted more (Larmour 1989).

Rennell Island has been a Polynesian outlier of the Solomon Islands, settled less than 1000 years ago. In the late 1970s, the population was about 1,300 (Larmour 1989). This population has now increased to at least 6,000 individuals. The bauxite deposits were distributed over the central plains of the Island in 1200 shallow 'puddles' (Larmour 1989). This was also where the people planted their garden, especially taro tubers as the main staple. As in the case of land acquisition for forestry, compulsory acquisition of land for mineral development was also used in this project. Trial Mining of 80ha was carried out in 1971 and 1972. Thus, the prospective benefit was calculated on the basis of the loss of fruit trees. The potential benefit to the landowners, had this project gone ahead, would have been 5% of whatever royalties the government received from the mining company. The land would be returned after use and new amenities consisting of a land, house and water supply elsewhere on public land would be provided for their resettlement (Larmour 1989).

However, the underlying discontent with government actions was the problem of reconciling mineral resources belonging to the state and not landowners. This was

why landowners should have been consulted more about such activities in kin group land territory.

4.5 Fishery resource development

4.5.1 Noro development

Forestry was one of the earliest natural resources exploited in the Solomon Islands. This was followed by a mining venture attempt in Rennell Island that was discontinued in the early 1970s. Fishery resources were the next development target. This began with the establishment of a joint venture company between the government and a Japanese multinational corporation. The joint venture company, Solomon Taiyo Limited, initially established a base and cannery in Tulagi. Tulagi was the former capital of the Solomon Islands in the Central Solomon Islands. In 1974, the expansion of the joint venture was proposed, by establishing a second base at Noro, on New Georgia Island in the Western Solomon Islands. A government-commissioned feasibility report was completed about three months after political independence. The Floyd Report was commissioned to investigate the potential of Noro as a 'new growth' zone (Floyd 1978). It had the potential for overseas ports, and for serving as the administrative and commercial centre for Western Solomon Islands. The Solomon Taiyo Development was one of the developments envisaged in the development potential of Noro. The report recommended the master plan development for Noro and the restriction of residential uses for the Noro land area. The Floyd Report also listed the rationale for the decision to expand fishery development in Noro, which included proximity to untapped fishing grounds, bait fishing availability, good harbour, and land availability for infrastructure development. At first, a wharf, freezers, an arabushi plant, and housing were developed. The development of Noro increased over the years until the late 1980s when the Noro Cannery became fully operational and replaced the original cannery in Tulagi.

Maruha Ltd of Japan owned Solomon Taiyo Ltd with a 49% share, while the Investment Corporation of Solomon Islands (ICSI) held the remaining 51% on behalf of the government. The joint venture company operated originally 15 catcher boats operating from Noro (Solomon Islands Government, 1979 #9), using the pole and line

method. Solomon Islanders were employed along with Okinawan fishermen. The project exported frozen and smoked fish to Japan and some canned tuna were also sold on the domestic market. During 1977, the project exported 6,893 metric tonnes of fish and fish products, which accounted for more than 65% of fish production in the country.

The government's position was that Solomon Taiyo Limited would eventually be owned by the government. This position was the justification for the establishment of the National Fisheries Development, a company fully owned by the government which was to form the basis for the development of the fishery industry in the Solomon Islands. Expert advice to commit the government to loan Purse-Seiner boats began the process of reselling the company due to inability to repay the loan. NFD was sold to a Canadian Company, British Columbia Packers Ltd. It was further sold again to Trimarine. In the recent social conflict in the Solomon Islands, the future of the fishery industry became questionable. The closure of Commonwealth Development Corporation (CDC) Oil Palm Plantation and the Gold Ridge Mining Project in 2000 severely affected the national economy and natural resource development in general. The company Solomon Taiyo Limited was also in the process of closure after its parent company Maruha decided to withdraw from the project. The government's response was to take 100% ownership through a new company called Sol Tai Ltd. The Western Province and Noro people challenged the central government as to why the provincial government could not share ownership of the new company. The debate that resulted was eventually settled with Western province taking 45% ownership of the new company.

Many instances of natural resource development in the Solomon Islands usually start with the government and a foreign party. In the case of Solomon Taiyo, Maruha was the foreign partner. The government usually maintained the attitude of representation of the nation's interest as whole, as well as the specific resource owners' interests. The issue here is that the resource owners persistently ill equipped to satisfactorily represent interest of the kin groups in the project. It was only in the context of the recent conflict that the central government, began to take seriously demands of resource owners or those who claim to represent their interests as the provincial government.

While the importance of inflation of the international market and other important economic factors cannot be denied, the persistence in marginalisation of resource owners remains an obstacle in resource development relations in Solomon Islands. As described in the case of forestry, mineral resources, and now fisheries development, resource owners have been relegated to the status of mere observers. The government and foreign interest groups establish the terms for relationship and development of resources in Solomon Islands. This only reflects the persistence of the instrumental articulation of kin groups in natural resource use in the Islands.

4.6 Land for agriculture

4.6.1 Guadalcanal plains

The Guadalcanal Plains is the only substantial flat land area in the Solomon Islands. Apart from the early coconut plantation on the fringes of the plains prior to the Second World War, the plains had been generally unutilised for commercial crops. These grassland plains became important when, prior to independence in 1978, an oil palm plantation project was proposed. Like other projects of national importance, a joint-venture company was established to operate this oil palm plantation project. The Solomon Islands Plantation Limited (SIPL) was then established. Through the process of compulsory land acquisition, an initial land area of 1478 ha was leased to the joint venture company (Larmour 1989: 20). This initial area was between Ngalimbiu and Metapona Rivers. This estate was commonly known as CDC 1 or estate one. The SIPL project, from its inception in 1974 to its recent closure in June 2000, was considered successful. From the view of the state and the joint venture company, this success was reflected in its consistent expansion over the years. By the time the project had closed, it had six estates and covered at least 6000 ha of land, and was in the process of negotiating a further 1000 ha when it was forced to close.

Like many similar projects, people's views about the success of the project varied. The project was considered successful for those who were dependent on employment. This was particularly the case for Malaitan labourers who worked in all the production stages of the oil palm project. The oil palm production process involves palm nursery, planting, maintenance, pollination, harvesting, and mill operation for

the extraction of crude palm oil for export. The level of labour required was semi-skilled and demanded limited training. This meant many workers were able to work as long as they were willing to carry out the manual work. The SIPL project was one which was less politicised than, say, the previously discussed Solomon Taiyo Ltd. One reason for this positive government attitude was employment, and of course revenue from taxation for the state.

The local landowners were, however, not so pleased with the project, in particular with the apparent immigrant population from Malaita, who were labourers, with their dependents. These excess labourers were involved in vegetable and poultry activities for the Honiara market while living with relatives working and living in the Solomon Islands Plantation Limited (SIPL) labour lines. This led to other related social problems, such as issues of a sexual nature. Initially there was much conflict among different social groups who have different methods of solving such issues of theft, adultery, and defilement. The SIPL management response was the formulation of committees to resolve these issues. The increase of Malaitan immigrant population over the years contributed to an increased use of Malaitan system of conflict resolution that was unfamiliar to others on the plantation. This led to numerous disagreements and, in particular, for the Guadalcanal Plains people, apparent resentment. The social tensions that emerged as a result of the immigrant population were exploited by project management in the case of SIPL. That is the practice of having too many labourers organised to live in one location for the benefit of export based projects.

Politically, the election process was also affected because many of these labourers were also voters, not necessarily for the constituencies of origin, say in Malaita or Temotu, but for the Guadalcanal Plains area. In other words, it was not only social issues that emerged as a result of the immigrant labour force for the commercial development of oil palm. The immigrant labour population began to change the power relations in areas where the projects were located. This is done because under the current national election laws potential candidates could be chosen from anywhere in the Solomons, especially from the islands of immigrant origins such as Malaita or Temotu and not necessarily from the indigenous population from the area. The difference in this new political landscape is that because most of the population in the

area are immigrant labourers, their political priorities shifted to labour issues instead of issues of concern to kin groups. Potential politicians, in such a constituency, often promote issues of concern to those in the area, thus creating tension. In the 1997 National Election, candidates used labour issues to obtain votes from workers. For example, one candidate, who was a unionist, sought election support on labour union issues among immigrant population labourers who were interested, but this situation also led to political resentment among people from Guadalcanal Plains.

Apart from social and political issues, there was also the economic issue. For many landowners, their concern about the benefit from the SIPL project was long-running. To give some indication of the early benefit arrangement for landowners from SIPL, in 1974, 1,478 ha of customary land were compulsorily acquired from landowners. In return, landowners were to benefit financially. This was done through capitalising anticipated rental income. Through this capitalisation process, part of the rental capitalised as a \$SI 48,035 share in the project was invested at 8% per annum. The other half of the land was paid in rent at \$5 per hectare per annum which was equivalent to \$A 3,843 or about \$SI 15 000. While there have been concerns among landowners, the issue did not come into the open until the development of the Gold Ridge project.

The development of the Gold Ridge project made Guadalcanal landowners uneasy with their deals in SIPL. It appears that royalty payments from Gold Ridge project were much higher than what the Guadalcanal Plains landowners had obtained from the SIPL project. This was particularly evident from the share ratio of 4%, 25% and 71% for landowners, the state, and CDC respectively. These issues have not been resolved from the view of Guadalcanal landowners. The recent social conflict in the Solomon Islands, as concerned the Guadalcanal people, was as much about a conflict about the distribution of benefits as a desire for political autonomy. Political autonomy was seen as a means of redressing economic inequality over benefit distribution from natural resource development.

4.7 Landowners' inequality

The nature of the articulation of relationships between kin groups and the state in natural resource development in Solomon Islands has evolved in some respects, while in other areas it retains many of the elements of state control. The element of the state control derives from the imposition of the state since the declaration of Solomon Islands as a British Protectorate in 1893. As the centralised state improved its position, the introduction of the doctrine of tenure followed in the early part of the twentieth century. This land reform process was the basis for the establishment of a plantation economy in the colony. It was an important structure that instrumentally articulated kin groups. The way this occurred was that kin groups had parted with many of the coastal land areas, as these were required for the plantation economy. Through the doctrine of tenure, land acquired was given as freehold or leasehold for a fixed period of time. This doctrine which allowed the state to control much of the land that was previously under customary tenure became the basis for discontent on the part of kin groups. It also created a sense of distrust and suspicion because of the uncertainty that developed over time in terms of relative benefit from the land lost to planters. It was this process of land loss that transformed previous relations in an instrumental articulation with kin groups. The control of land by planters, the state, and churches were seen as loss to kin groups. This was not only because of the land itself, but because kin groups now saw what the planters were using the land for. Economic activity reflected masses of wealth. The loss of land and subsequent perceived economic wealth created by planters, conflated with the attitude of planters as hostile and heartless in use of their weapons, created a sense that the relationship between kin groups and planters was unsatisfactory. The planters' control of land, after acquisition, through the use of force, for which they were sometimes not held accountable, was an extreme form of instrumental articulation.

It was not only the land reform that introduced the doctrine of tenure that caused distrust and a sense of loss of entitlements, but also the introduction of state machineries in the 1920s which saw the introduction of a 'headman' system. This new administrative system then displaced older leaders because the selection process for representatives was carried out at the behest of the state. For example, there was the use of church members or old plantation workers. Through this headman system of

administration, control was established at the state level in Solomon Islands. The state introduced programs of what it called pacification. This was important to rid the state of individual criminals, but at the same time it was also an expression of the new authority of the state. The state authority was coercive from the point of view of kin groups because of its policy of compulsory acquisition provisions of land, which the state reserved the right to use at its own discretion. Under the conditions of political authority and introduced policies of land use, the relationship between kin groups and the state was hardly a level playing field, and this resulted in kin groups' concerns about their rights being oppressed, but not eliminated. Thus the pre-world war period could be described as a period of greater instrumental articulation, where state policies were heavily enforced and kin group consent was obtained under pressure. The goals of the state to develop commercial activities were then seen as more significant for the goals of kin groups whose expectations were to obtain their 'entitlements'. This implied, in other words, maximising the means to access those European material goods which were seen as useful. But as knowledge about the exchange increased especially when other sympathetic Europeans were saying they were getting less than they should, it became the basis for discontent and strife for redress.

The Second World War put an end to the plantation economy, as planters and government officials fled to their home countries. The Japanese invasion destroyed much of the infrastructure and, following the war, attempts to rebuild the plantation economy became extremely difficult. The collapse of the plantation economy was thought by many Solomon Islanders to be a 'good' thing because these plantations were risky areas for workers. While such collapse meant reduced access to labour to obtain European goods, it was not missed for other reasons. The previous experiences with the state and commerce by kin group members in relations to land, labour conditions, and the war, made post-war natural resource development more sluggish.

This sluggish attitude was reflected in the way that kin groups started responding and asking questions of the state representatives on proposed natural resource development. For example, there was the case of Gold Ridge landowners who refused to accept exploration because they thought it was a time for self-reflection after the war in 1945. The kin groups' attitude of general suspicion persisted during the process

of forest estate development in Solomon Islands that started from 1962 until the political independence in 1978.

The relationship between kin groups and the state following the war improved in relation to the pre-war period. In particular, as part of the international environment after the war, there was a change in attitude towards allowing self-determination among colonies. In the Solomon Islands, this meant that the British government had to find means to finance the state. The state's response to this situation was the introduction of forest resource management policy. The idea was for the managing of the forest for exploitation in a sustainable manner. But many of these forest areas were under kin groups and the process was to access these areas and defined as forest 'Estate'. The processing of Vangunu Island as the first forest estate showed that people were quite uncertain about this new idea. The dissatisfaction of Vangunu landowners was expressed in letters to the government complaining about the arrangement for acquiring the land area.

Despite the general scepticism expressed by kin groups about existing government policy, the state was able to persist in establishing a forest estate policy. Through the use of the District Commissioner, District Officer, District Headman and Village Headman, the state continued to acquire land for the forest estate and it was persistently pursued and established anyway. The need for land review that arose in the 1950s was motivated by the need to identify what form of tenure would be most appropriate for forest estate development. The acquisition of Vangunu in 1962 was an example of the process applied in forest estate development. The idea of establishing these forest estates was to meet the goals of revenue for the state and stimulate economic development. But for the landowners, these forest areas were not just commercially potential resources, they were also medicine, a food source, building materials, sacred sites and specific territories with specific groups of people. Thus the national goal of economic development was brought directly in confrontation with kin goals which, though undefined, exist with multiple purposes that such areas hold for the survival of the people. Thus, the kin groups were faced with the same dilemma when faced with the state proposals. That was the need to balance the desire to obtain material goods valued in society and that of retaining their environment for survival. The chance to acquire European goods was limited and, apart from selling personal

labour, the next choice was the reluctant compliance with the state with demands for as much material benefits as possible. That said, such demands were of little use, since the state simply made proposals and ensured compliance. This form of relationship was, on the part of kin groups, a matter of survival and not about just arrangements. As a result, while the state's objective may have been genuine, the kin groups' sense of doubt and suspicion meant they could not commit to ideas of natural resource development, in particular when the state and the company were closely associated in the process of decision making that had affected these resources. The goals and the expectations of kin groups appeared immaterial.

4.8 Conclusion

The process of establishing the state and the introduction of a new doctrine of tenure has influenced general thinking that the state was self-serving. It was because of the policy on natural resource use that kin groups continued to see issues of land and resources as threatening. This was also the basis for the emerging thinking just before independence that perhaps if the colonial state was removed, then acquisition of European goods may be easier and fairer because of the assumption that a locally-based state would understand that natural resources belong to the kin groups and not the state. The state would of course be given shares, but not the other way round. This would apply for all natural resources.

The few Solomon Islanders who were exposed to the colonial administration prior to political independence were even convinced that if they had achieved non-colonial status, the new state would automatically return all the land lost by kin groups, as well as allowing greater political engagement. The development of fishery projects, in the years running up to independence, was influenced by such thinking, at least on the part of Solomon Islanders. That was the idea of joint venture projects, which assumed that the independent state would ensure that in natural resource development there would be 'partnership'. The partnership in any commercial development was justified by the perception that, on one hand, the state which represented the people who had the resources, and the company that had the capital and technology, on the other hand, were mutually independent. This approach was also evident in the simultaneous development of another joint venture project in Guadalcanal under the joint venture company SIPL.

But soon after the project was established, like the previous experiences before the war, kin groups saw their commercial partner appearing richer than themselves. This time the state, which had much more expected of it, was also not only letting them down, but seemed to be taking advantage of them. The SIPL landowners were dissatisfied with the arrangement over the oil palm project and were soon demanding to be given further shares in the project. Thus the perception of kin groups was that their entitlement to a larger share in the project was persistently circumvented. The relationship between kin groups and company and the state was seen as outrageously unequal. From the point of view of the landowners, no stakeholder is more important than kin groups who have the resource in the first place. Both the company and the state were necessary guests but their share in the resource should not be more than the owner's rights. This is obviously a point of contention since the state and company saw entitlements of kin groups as no more than a beneficiary to be paid for 'doing nothing'. The landowners saw the state and company as parasites: without resources they were nothing. In other words, the relationship over natural resource use was seen as not reciprocal. At least this was so from the perspective of kin groups.

For landowners, the new situation was one of dilemma. How far should land owners push for their 'entitlements'. What magnitude of entitlements is fair, and at what point would it be impossible to interest companies in maintaining commitment to a proposed project? While the state sustained its goals for economic growth and employment opportunity, and the company persisted with its goals of maximising profit, the kin groups' goals remained undefined and multi-faceted. The kin groups' undefined entitlements remain a significant issue in Solomon Islands. This is because, in the past, kin groups were seen largely as an 'economic inconvenience'. This is because they live in the vicinity of natural resource development interests and may destabilise proposed projects. The idea of compensation for social dislocation was therefore not framed in terms of landowners' ownership of resources but rather as payment for their disturbance. Thus kin groups persistently think their ownership rights have been circumvented, as their entitlement as resource owners was not considered. This is an important point of contention in forest as well as mineral resources because the state retains the rights of ownership.

The kin groups could not see how the state could own the natural resources without their consent. Since the state has in the past not obtained their consent in the environment of free expression, how could the post-independent state persist with this policy position towards kin groups? The landowners see the state as an organisation that should be created by the people, including kin groups, and not left to create them in the image of its own purpose. Sharing kin group resources with the state makes sense to kin groups. However, from the point of view of kin groups, the state should have only be allowed to share resource benefit given to it by kin groups who own the resource in the first place. While the kin groups' situation has improved in terms of political voice, and to a large extent they are involved in natural resource developments that affect them, the issue of state control remains.

Chapter 5

Kin groups and mineral exploration

5.1 Introduction

The previous chapter examined the nature of the relationship between kin groups and the state in natural resource development in areas other than minerals. This chapter, for its part, examines the nature of the relationship with kin groups in mineral resource development, especially gold. It aims to demonstrate that the history of mineral resource exploration and development was also a history of forms of relationships with kin groups. This chapter seeks to demonstrate that the relationship over gold was predominantly of an instrumental form. This will be demonstrated through the historical nature of gold as a commodity, and the practices that were associated with its exploration and exploitation in interactions with kin groups.

Kin groups in Solomon Islands had limited knowledge about the value and the use of gold. Exposure to the activities of gold-seekers by kin groups made them realise that Europeans were after gold, which was a highly-valued commodity. Kin groups had little idea that gold had a long-established legacy. It was no accident that the Spanish explorer Mendana named the islands 'Solomon Islands'. Mendana thought the islands were where the biblical King had obtained his famed wealth. The kin groups did not know that the explorers were on voyages to discover new wealth for their home state. This period of sixteenth century gold and silver discovery in the Americas, and later in Australia during the nineteenth century was a significant development. This pattern of mineral resources exploitation found its way into Melanesia in the modern time. Gold was the driving force behind the state and commerce at the time, and over the subsequent years. In other words, gold exploitation, as being experienced in Melanesia including Solomon Islands, was simply a tail end of a long historical process that has affected many societies, including this region of the world. In this sense, gold seeking was an externally driven force.

Gold as a resource was an integral part of the colonial nation state and capitalist development. The mutually re-enforcing nature of state and capitalist activities meant

that minerals like other resources, needed to be exploited for world trade. In the previous chapter, we learned that in the case of Solomon Islands, the introduction of state machinery and the doctrine of tenure were fundamental for accessing natural resources. In the case of minerals, this went one step further in that the state now declared ownership over the mineral resources. The idea was that any thing below six feet belonged to the state, while the soil up to six feet in depth made up the land owned by kin groups. Debate about the applicability of this policy in post colonial Solomon Islands is discussed later in this chapter (see section 5.4.2). It is sufficient to mention here that the colonial policy of state ownership of minerals remains a fundamental issue in resource use in Solomon Islands.

This policy was totally unacceptable to kin groups. The landowners did not see their land as having no depth and content. Land was seen as inclusive of all that can be found above, on and below such territorial area. Thus, for kin groups, it follows that because land is theirs, everything associated with it also belongs to their community. This was a major point of contention that characterised the relationship between kin groups and the state, or between kin groups and gold-seekers. There was a divide between landowners who saw mineral resources as a group resource, and the state which insisted on its right to control and own the mineral for the nation as a whole. Thus, the kin groups and the state were on a collision course over the development of natural resources, especially minerals.

The next section will describe the historical phases of mineral explorations in Solomon Islands and reflect on the practice of relationships with kin groups.

5.2 Early exploration phase

The historical context of mineral resource development relations in Solomon Islands can be categorised into three major phases of mineral resource activities. These three phases are the Early Exploration Phase, the Post war Exploration Phase and Post-Independence Mineral Exploration Phase. The early phase of mineral resource exploration in Solomon Islands covered the period between the Spanish arrival in 1568 and the outbreak of the Second World War in 1942. Exploration for mineral resources did not quite encompass the entire period, but was nonetheless significant as

it exposed the potential for finding minerals in the islands. The Post war Exploration Phase, as its name implied, started after the Second World War. Finally, the Post-Independence Mineral Exploration Phase was part of the new state's initiative to promote economic growth and development. The phases of mineral resource development activities are relevant in that they attempt to show that the nature of relationship with kin groups reflects a particular form of articulation. That is an instrumental form of articulation. In other words, the state used its position to access mineral resources for commercial exploitation to meet both the state's and company's goals but avoided kin group issues affected by such projects. In the next sections, descriptions are given of the different phases of mineral resource explorations leading to the development of the Gold Ridge Mining Project between 1995 and 1997.

5.2.1 Mendana to woodford

The first time that gold as a mineral resource was associated with Solomon Islands is attributed to the Spanish explorer Mendana in 1568 (Jack-Hinton 1962). The Spanish explorer had thought that the islands might have been the legendary Isles from which the biblical King Solomon obtained his gold wealth for the building of the temple of Jerusalem. As to how Mendana came to such conclusion is not clear. The dominant idea about why Mendana could have thought so was that in their landing at Metapono river mouth Mendana and his crew had found traces of alluvial gold. Metapono River is the main river stream at which Chovio stream and the Chariunga stream converged. The present Gold Ridge Mine area is located between these two streams. It was thought that this alluvial discovery led to the naming of the Islands as "Solomon Islands". An alternative view about this was that Mendana could not have named the Islands because only a few traces of alluvial gold were found. While such alluvial gold may have been necessary, it was Mendana's encounters with the Islanders wearing ornaments that closely resembled gold that might have given him the illusion of the presence of a massive wealth of gold. According to Daniel de Coppet, Mendana's encounters with the natives of the southern tip of Guadalcanal and southern region of Malaita was what gave him the impression that the islands may have contained a wealth of gold (de Coppet 1977). The warihau was an ornament worn by chiefs of Are' Are dialect in Marau sound area (de Coppet 1977). The

ornament was in fact two stones or pyrites woven together at the end of a stick, which were also decorated with shell inlays. Mendana came across this ornament again when he came into contact with the natives of Parasi, Small Malaita in which Mendana had arranged to exchange a cloak for one of these ornaments (warihau). According to de Coppet (1977), it was these two encounters that reminded Mendana of the wealth of gold which people wear it as an ornaments, and was responsible for Mendana calling the islands, 'the Solomon Islands'. The warihau ornament was later discovered to be made of pyrites, and not gold, but the name remained 'Solomon Islands'. This disappointment about gold in the islands remained dormant, while the fable of the abundance of gold persisted for several centuries among circles of European explorers. This was particularly the case with the publication of Mendana's Voyages in 1771 (Solomon Islands National Library 1970).

Many more European explorers came to the Pacific following Mendana. The settlement of Australia was particularly relevant because it became the main base for early traders, and subsequently miners. The settlement of Australia and New Zealand by Europeans was important factor because it was the same forms of policy introduced there found their way into the Pacific Islands nations. That is because of miners' interests expanding rapidly in the early nineteenth century (Bartlett 1967: 30; Bateson 1974: 31). Gold prospecting and development in Australia became the focal point at which mineral resource development expanded into the Pacific Islands. Most important was the policy on mineral resources. The major policy declarations were first introduced towards the end of 1851, by the Governor of Victoria, La Trobe. He declared that the gold belonged to the crown. This policy proclamation was that,

Whereas ... certain persons have commenced or are about to commence searching for gold...the property of the Crown...Without authority...prosecution will be launched against those who do so without procuring the necessary License (Bartlett 1967: 44).

During the settlement of colonies in the region, many Pacific Island countries became colonies of the major European powers, including the Solomon Islands. This meant the establishment of the colonial state that formed the basis for the subsequent relationships established with kin groups.

In regards to mineral resources, apart from the Mendana encounter and the association of the islands with gold, there was no further mineral exploration for two centuries. It was not until a British naturalist by the name of Woodford, who was on a mission to collect samples for the British Museum in Guadalcanal, is reported to have found traces of copper mineral in 1885. His attempt to reach the centre of the island of Guadalcanal was not successful. The 1885 trace of copper found by Woodford sustained external interest in the potential of mineral resources in Solomon Islands aroused by Mendana several centuries earlier. In the meantime, Britain declared the Islands as a Protectorate in 1893, and by 1896 Woodford was appointed the first Resident Commissioner in the Solomon Islands. Apart from this sporadic reporting of the presence of minerals, there was no serious attempt for exploration until later in 1896.

5.2.2 Austrian expedition: 1896

The 1896 Austrian expedition was the result of explorers passing information about potential gold deposit areas they had visited and explored (Grover 1955; Guppy 1887; Hackman 1980). In the context of the neighbouring Papua New Guinea, such early exploration was carried out during 1878 (see Chapter 3).

The Austrian expedition was led by Heinrich Foullon Von Norbeeck, an expert geologist. He arrived with his party at the north coast of Guadalcanal on Tetere Beach on the vessel *Albatross*. The expedition was to climb Mount Tatuve, a mountain held sacred by the Manukiki and Manugaravu tribes of central Guadalcanal. A party of eighteen Europeans and four coastal natives walked to the mountain up to its foothill, some 3,250 feet at a place called Vulolo (Grover 1955:11). The day before the ascent of the 5,327 foot mountain, the party was warned by the natives that their climbing of the sacred mountain would result in the death of all the natives for its defilement. In the morning, the party ignored this warning because the chief geologist decided they must climb the mountain anyway. The party was attacked, injuring members of the party and resulting in the death of Heinrich Foullon Von Norbeeck that night (Grover 1955: 11).

This incident was the first conflicts associated with mineral resources in Solomon Islands. The natives of central Guadalcanal were of course unaware of the interest in

gold, but were more concerned with the sacredness of the mountain and the effect on the population of its defilement. In any case, this incident shows that the lack of understanding between groups may lead to grievances, and even violence. The event also showed that, to the gold-seekers, the issues of sacredness were not so important. In other words, as early as this incident in 1896, the relationship as expressed through gold-seekers and kin groups was influenced by misunderstanding and the determination on either side of the parties to protect their interests. It also showed that interests of both the gold-seekers and kin groups differed, even though they concerned the same mountain.

This incident led to a lack of interest in further mineral exploration in the Solomon Islands. At least for the next 24 years, there were no exploration attempts. But paradoxically, it was the knowledge about the Austrian expedition that led to other attempts of exploration in Guadalcanal. In one case, a family in Germany found mineral specimens belonging to a deceased relative who was in the Austrian expedition (Grover 1955: 11). The specimen was found to have a high content of gold and copper and it was thought that the presence of alluvial gold in the nearby streams was most likely. An application was made for prospecting, but was refused by the colony's administration.

In another case, Australian miners were found prospecting illegally in the colony. The miners, including Dr. Henderson and three other Australians, were found by the colony's District Officer at Wanderer Bay, on the Weather Coast of Guadalcanal. He explained that he was following a lead from the previous Austrian expedition. Dr. Henderson sold his exploration equipment for fuel money to return on his boat (the *Ketch Bongo*). Subsequently unable to obtain finance for his exploration activities he committed suicide (Grover 1955:11).

What some of the attempts at mineral exploration described above show was that gold-seekers were acting within the context of colonial expansion, namely, the search for alluvial gold discovery in the newly established colonies. There is also the element of a shift in attitude towards the locations of gold prospecting by gold-seekers and the administration. This attitude was now that gold prospecting was largely a state issue and thus kin groups were secondary in the matter. This attitude suggests the shift in

state control of prospective areas from any notion that kin groups remained the territorial owners of such prospecting areas.

5.2.3 The “wild-cat-schemes” period: 1920-1942

After the Austrian expedition in 1896, there was little, or no, mineral resource prospecting in the Solomon Islands until the 1920s. The unreliable reporting of mineral finds since the 1920s caused much confusion, which has been referred to as the “wild-cat-schemes”. This period of the wild-cat-schemes chase for gold in the territory, was obvious on the Guadalcanal Island. Planters like Wilson and Klotz were reported to have also found traces of gold. There was similar reporting about gold nuggets found in Massey River in the New Georgia Island in 1929, which was later found to be untrue.

However, as in the PNG context, where the first serious mineral prospect was found at Edie Creek, in Solomon Islands mineral was found on the Metapono River tributaries. In 1931, Kajewski, a botanist from Queensland, found traces of gold in the Balasuna River, including its two tributaries, namely the Sutakama and Sutakiki Rivers (Grover 1955: 12). Kajewski was credited for finding gold, leading to the Gold Ridge deposit investigation, because of gold found in the two tributaries of the Metapono River, namely the Sorvohio and Tsarivonga Rivers. These two tributaries are located at the head of Metapono River, where alluvial gold was found. This was the same river where Mendana and his men found alluvial gold in 1568. It was Kajewski's gold find that led to the formation of the Balasuna Syndicate. The Balasuna Syndicate continued prospecting on both river systems in 1934. A company called Guadalcanal Limited, registered in Fiji, floated 30,000 pounds, but their mining engineer, after visiting the Gold Ridge area, decided against its development.

There were other numerous prospecting schemes, such as Guadalcanal planters, namely the Clift brothers and Anton Olsen, who found alluvial gold in the Tenaru River, west of Gold Ridge in 1933. Later Olsen and his wife found deposits in the Betilonga Basin, and B. Dufaur did the same in Kombito River in 1934. However, these gold findings were not sufficient to encourage any full venture into mining (Grover 1955).

There were also more “wild-cat schemes” chases in the areas considered most likely to have gold. After the withdrawal of Guadalcanal Ltd, the original syndicate acquired its tenements and proceeded with further exploration. In 1936, other interested miners joined in a prospecting scheme forming Pioneer Expedition No Liability. Exploration work was done for the lower Sorvohio River Valley and Kovogombi. The Sutakiki Company was also formed, but after some attempts, infrastructure difficulties finally caused the company to withdraw. Geologists persisted, including geologists like Ault who had extended Kajewski's knowledge about Gold Ridge field where more alluvial deposits were found. This new information motivated the Solomon Islands Gold Development Ltd to be formed in 1937 to finance the Balasuna Syndicate tenements of Gold Ridge area. Thus the colony's administration declared the area a mining area, and the first mining lease in the country was granted in 1937. The Company could not raise the capital and the lease was terminated in September of the same year. In the meantime, gold smuggling to Australia was reported to be prevalent.

In 1939, more mineral exploration samples were sent to Australia by the Balasuna Syndicate. The assay was found to be favourable. The government was happy about the result and requested for a mining engineer to report on the field. This was done by Mr. Fry, a mining inspector. He arrived in the Solomons from Papua New Guinea. However, he reported the Gold Ridge field to be still at an infant stage. He also confirmed gold smuggling to be taking place (Grover 1955:12).

From 1939 to 1942 there were similar prospecting interests, which rose and fell as quickly as they started. For instance, this was the case of L. J. Davis and his son James who arrived in 1939. Their findings, including gold nuggets, led to renewed interest and by 1940 the area was declared a mining area. With new principal interests from Australia, the leases were worked through dam-making, fluming, and hydraulic sluicing at Tabalusu prospecting. Financial constraint was once again responsible for closure and cancellation of leases (Grover 1955:12).

Balasuna Syndicate further brought what they considered to be a skilled miner from New Guinea 1941, namely R.C. Symes. More hydraulic sluicing was carried out, but the Second World War forced the closure of the prospecting and mining work.

Just before the Second World War, Emperor Gold Mine Limited was also given a prospecting tenement in the Solomon Islands. This was the Sutakiki area covering an area of 480,000 acres of Guadalcanal Island. The colony's condition was for the company to spend at least 10,000 pounds on prospecting in the territory over a period of five years. Thus, Solomon Gold Exploration Ltd was formed and the tenement transferred to carry out the exploration. The Second World War compelled the work to stop. In 1945, the attempt to resume was discouraged after finding out that its tenement agreement only specified one mineral only, on which the administration insisted, and therefore Theodore, the owner of Emperor Gold Mines Limited of Fiji declined and withdrew his company. This treatment of companies was perhaps a contributing factor to the slow progress in prospecting in Solomon Islands in later years.

What is reflective of the above period was the absence of kin groups in decisions made about mineral exploration in the colony. Like the Austrian expedition, which was on a mission to find gold at almost any cost, the subsequent gold-seekers were venturing out in some cases at their own will. The colony's administration, however, remained the authority to issue prospecting and mining licences. The first mining license to be issued in the colony was in 1937. The way the state approached the granting of a license was usually by declaring an area to be containing mining potential an area of 'national interest'. Kin groups were soon to realise that any of their land territory could be declared an area of 'national interest' and thus marginalise their rights in making claims over the minerals found. This form of state behaviour characterised an instrumental form of articulation which resembled similar relationships over other natural resources as discussed in the previous chapter. In any case kin groups developed grievances because of their perception that they were getting little from their resources that culminated in the consciousness towards resistance movements in the post war period.

5.3 Post war exploration phase

The Second World War acted like an enlightenment period for kin groups in their interpretation of foreign powers and the way they conduct relationships with kin

groups. They learned that the Americans were friendlier than their existing British leaders, especially in terms of the way the white Americans and Black Americans fought the Japanese side by side. The Americans were also telling Islanders that they should rule themselves, instead of someone elsewhere deciding what should happen to them in their own country. These experiences confirmed an already existing feeling that kin group members had about their relationship with the colony's administration. The Maasina Ruru movement that started in Are'Are in Malaita Island after the war was a movement towards creating a new 'governing system' that recognised islanders as equals. Although the Massina ruru movement was soon subdued, the consciousness about the inequality in the relationship between colonial masters and the Islanders became a common concern. The issues of concern to kin groups were fundamentally about the relationship over natural resource use. There was the issue of land tenure which represents the identity of kin groups. Guadalcanal Island, where much of the colony's mineral explorations had taken place, became a centre for another movement. This was the Moro movement.

5.3.1 Moro movement

Like the Maasina Ruru movement in Malaita immediately after the war, Guadalcanal leaders were also concerned about their land territory. The loss of land and persistence in mineral exploration brought a realisation for resistance. This perception was an important factor in the formation of the Moro movement in Guadalcanal. The Moro movement was named after the leader of the movement, Chief Moro himself. In 1957, Moro from Southeast Guadalcanal had a near death experience, in which he had a vision (Davenport and Çoker 1967, Hogbin 1939). In the vision, he encountered the creator of the island whom he called Tsobotua. The creator explained that the island belonged to him and his people. He also explained that the original name of the Island is Isatabu instead of Guadalcanal. Research done on the movement suggested that the content of the near death experience purported to establish:

- leadership autonomy over Isatabu by the creator Ironggali in the personhood of Tuimaauri (the first paramount chief and cultural hero in his own right)
- the role of local leaders (chiefs) as the centre for economic activities, and defender of the area territories and customary law

- proclamation of political legitimacy of Moro himself as successor of Tuimauro, and
- the repudiation of Waste and Public Lands concepts (Davenport, et al.1967:145).

The Moro consciousness which developed before political independence from Britain reflects the demand for recognition of Isatabu Island, the role of its traditional leadership system including its customary laws, and outright rejection of legal acquisition of customary land (Davenport, et al.1967:145). The important point about such a movement was that it was rooted in the culture, people and indigenous notions of rights. The demand for political autonomy and the repudiation of 'Waste and Public Lands' concepts were direct forms of resistance to state control and the doctrine of tenure introduced into the territory. These cases were clearly of perceived inequality in terms of the relationship between indigenous communities and others over natural resource use.

The Maasina Ruru ideology which had spread after the war also demanded improvement in labour conditions. This stand by kin groups meant that there was a labour shortage, which affected prospecting work as prospectors were dependent on native labourers for digging and carrying their equipment. But the effect of such a movement on the mineral exploration in Guadalcanal was sustained only temporarily. The colony's emphasis on mineral exploration was further continued. This was demonstrated by the geological survey done by the British Solomon Islands Protectorate (BSIP) government in 1950. The colonial administration in 1950 carried out a geological survey under the leadership of J.C. Grover. It was through this work under Grover that potential areas were indicated, including the classification of the Gold Ridge area as a silver-rich epithermal deposit (Grover 1955, Reveleigh 1990).

The government's sustained exploration for minerals soon took hold again after the war. Many kin groups in the area became participants, first as labourers who were carrying equipment for the gold-seekers, and soon as knowledge about alluvial gold was picked up the kin group members were becoming gold-miners too. The knowledge about alluvial gold became part of the local community as a result of the

Gold Ridge area exploration, which soon began to show its impact on the local community. After the post-war period, alluvial gold seeking and mineral explorations in the Gold Ridge area began to transform the local community's pattern of settlement and subsistence gardening. By the 1950s, local settlement developed around the area, which became permanent villages as a result of interest in gold panning after many years of encounter with mineral explorers (Naitoro 2000; Roe 1990). The long-term explorations involved in the Gold Ridge area had a significant impact on the local community. This was not only the case on settlement patterns, but also subsistence ways of life begin to change with little emphasis on gardening and more focus on gold panning.

The relevance of the Moro movement was its concern for land and traditional leadership of their island. The persistence of state policy to push on with exploration for minerals also showed the reluctance on the part of the State to reconsider its policy of mineral exploration and development which directly affected kin groups. What seems clear during this period was an emerging resistance by the kin groups to the relationship they had over resource use and its control by the state. The state's continuation with mineral exploration, despite such local social movements, suggests that there was a clear position for the state to remain controlling the right of resource use. But equally important was the transformation of kin group perceptions about gold, the emergence of a sense of ownership, and the right to value natural resources. Knowledge was an important factor in relationships over resources, as shown in the change of kin group attitudes towards minerals. As greater knowledge about the mineral was acquired, there was greater insistence on the right to own or share the resource. Thus, it was the perception that gold-seekers were taking much of the wealth of gold from kin groups, who considered themselves as the landowners, that was to become the key basis for contention in subsequent years. The state and expatriate gold-seekers were seen as using the policy of state ownership as the basis for excluding legitimate rights of kin groups in mineral resources.

5.3.2 Gold Ridge exploration: 1971-1975

As talks about independence became more open, local landowners were again on the move to protect what they considered to be their social right. This right was derived

from associating mineral resources with land, but also the right to benefits from it. This was because there was kin group awareness about the value of gold to prospectors and the need for representation of kin group rights to benefits from mineral resources. It was under these conditions that the government decided to register the Gold Ridge land area, which was previously known as Chovohio and Tsarivonga- LR 382 in October 1973 (Broughton 1978: 44). But as political independence seemed on the horizon, the local landowners objected to the government's application to register the Gold Ridge area. The landowners wanted the return of the Gold Ridge land area occupied under previous licences since 1937. But the government persisted, and thus the Gold Ridge prospect was put out to tender. CRA Exploration Pty Ltd won the tender and was granted the Special Prospecting Licence C115 in 1974.

Apart from information gathered from the long historical exploration associated with the Gold Ridge deposit, it was not until 1971 that Dr. R.D. Walshaw's study of Gold Ridge concluded that the potential existed for a large open-pit operation (Reveleigh 1990:5). The exploration work between 1971-75 also provided significant data on the Gold Ridge area. During 1971-72, Walshaw, of the Institute of Geological Sciences, London, analysed more than 1000 samples from the area for gold, in which he identified distinct arsenic anomalies over the Gold Ridge area and two other near-by locations (Reveleigh 1990:5). These were the Valehaichichi and Namachamata areas. The work on these two locations showed that the mineralisation anomalies had extended further into two other areas, namely Dawsons and Kupers. These four locations lie in a north-south direction for 2km with Dawsons in the north and Namachamata to the south. Drilling to the bedrock also confirmed large quantities of gold. Walshaw's study suggested that the gold deposit may have originated from mudflows associated with that of a volcanic vent/s, that gold deposit resulted from hydrothermal alteration (Walshaw 1974).

CRA Exploration Pty. Ltd did further samples of previous study areas such as the Walshaw's pits. The company analysed 96 samples of Walshaw's and found higher gold content (Walshaw 1974). The company also took 620 samples from auger to bedrock and confirmed Walshaw's anomalies. Further diamond drilling was done, totalling 496m on top of the Gold Ridge area including a detailed map of the

mineralisation concentrations. It was thought at the time that the mineralised volcanic deposit was about 0.25-2g/t Au with concentration averaging 2-3g/t. This concentration level was seen as unsatisfactory to justify further exploration. After further prospecting program between 1974 and 1975 CRA Exploration Pty concluded instead that it was unprofitable and left (Reveleigh 1990).

For the next several years, until independence in 1978, there was little or no mineral exploration in Solomon Islands. The kin groups were, however, full with new hope for the post-independence period. This was particularly the case with regard to regaining roles of the traditional leaders and a change in the introduced doctrine of tenure that was responsible for the loss of customary land. These hopes were high, because of the loss of control and a sense of asymmetrical relations in natural resources use in the history of Solomon Islands.

During the decade following independence, there was renewed interest in mineral resources in the Gold Ridge area. Before then, though there was much exploration, there was no clear indication about any commercial basis for mineral development in the area.

5.4 Post-independence mineral exploration phase

Despite local expectations for greater changes after independence in land policy and those affecting resources, this did not take place in the case of mineral resources. The mineral policy in the Solomon Islands remained as it had been inherited in 1978. Historically, the mineral resources policy upheld the notion of state ownership of mineral resources. While such policy on land, known then as the land laws, had changed, the same did not happen with mineral resource policy. Instead, the state remained the legal owner of mineral resources and this therefore remained an existing issue of tension in the Solomon Islands' resource policy.

From the point of view of the state, mineral resources belong to the state. This means despite land ownership as recognised by the state as customary, this landownership that excludes mineral resources. The state's attitude that minerals belong to the state meant that tenders for any prospects and issuance of tenements were largely its

domain. Again, impacts on indigenous communities were largely ignored. However, with few discoveries of potential mining deposits, exploration in the Solomon Islands declined after political independence in 1978. One account for the decline had been the uncertainty brought about by the kin group attitude to land policy after independence.

5.4.1 Company exploration between 1983-1990

In the early 1980s, the declining trend in exploration had changed. There was more interest in mineral resource exploration in the Solomon Islands. Part of the reason for this change was trends in the world market. The increasing world prices of gold and the discovery of a world class mining project in Papua New Guinea led to more interest in gold prospecting along the 'Rim of Fire' (Connell 1988) of which the Solomon Island is a geographical part. But it took another ten years before potential mining companies expressed mining development intentions.

About ten years later, the rise in the price of gold prompted the government to tender the prospect again and this time Licence 130 was issued in 1983 to Amoco Minerals. Amoco Minerals changed to Cyprus Minerals Solomon Ltd in July 1985 (SIG 1990: 14). In 1986, Cyprus Minerals entered a joint venture with Arimco NL. In 1989, Arimco acquired the remaining shares of Cyprus. This form of handover of the Gold Ridge tenement created much local suspicion in the 1980s and early 1990s.

It was not until May 1990 that Arimco lodged a Special Mining Lease application. This required the company to submit an Environmental Impact Assessment and a feasibility study report. The study was submitted to the Solomon Islands Government and Rio Tinto Zinc (RTZ) was contracted by the Commonwealth Secretariat to carry out the appraisal (SIG 1990). The RTZ appraisal report concluded that the Gold Ridge project was marginally viable. In 1992, Green Equity investors bought Arimco. Due to the lack of co-investors to share the risk in investing in the project, Green Equity withdrew altogether.

In 1994, the Government again tendered the Special Prospecting Licence (SPL) 185. Saracen Minerals Ltd won this tender. Saracen Minerals then sold the SPL to Ross

Mining NL Ltd It was subsequently found that Saracen was not a mining company but rather a gas company. This event generally led to greater suspicion about the genuine position of transnational corporations.

Lack of information among kinship groups about mining activities and markets left room for much speculation. Kin group suspicions were made worse when there were reported cases of gold-smuggling in the late 1980s from Solomon Islands to Australia. Such smuggling speculation led to stories about Zanex Mavu Gold Mining Ltd being involved in smuggling some 12737.5 gms of gold in 1997. This speculation went as far as the Parliament of Australia, when Senator Sanders asked the Labor foreign Minister Mr. Gareth Evans whether he knew of the 'illegal gold smuggling trade to Australia from Solomon Islands' (Australian 1987: 22). Such incidents meant landowners' trust of the state and its capacity to represent landowners and their community's interests declined considerably. There was greater suspicion of foreign companies operating in the Solomon Islands. This suspicion of foreign companies had been around for some time and it was one of the reasons for the political pressure to change the mineral policy in the 1990s.

5.4.2 Mines and minerals Act 1990

Solomon Islands' political composition makes the demand for change of policy desirable but perhaps not necessarily achievable. There were intentions for policy change which were seen as desirable by some politicians because most of them were indigenous landowners themselves. This meant that the policy of state ownership of mineral resources was constantly at odds with the state position for universal development and the indigenous positions on mineral resources, which were concerned with direct benefits to those directly affected and paid the environmental and social price for project development.

One attempt to deal with this issue of mineral rights policy was the parliamentary discussion of the 1990 Mines and Minerals Bill (Allan 1990). During the 1990 parliament sitting, the issue of mineral rights went before the parliament. This was in expectation of the future development of the Gold Ridge project. The issue was

whether mineral rights should be passed back to customary landowners. The Minister of Mines and Minerals, then Hon. Allan Paul, argued that there was little knowledge available to kinship based communities about mineral resources (Allan 1990). His view was that the need for large capital investment requires the state to own the rights to the minerals. He further argued that state control was necessary for the equitable distribution of minerals benefits. This has been the standard argument until the present.

The existing argument was that the state should own the mineral resources to allow large scale investment in Solomon Islands. This remained an issue for kin groups because it was the same state that had also recognised kin groups as customary land owners. The state's acknowledgment of the customary land ownership was a partial recognition of customary ownership of minerals in so far as kin groups were concerned. Also, the state did not have to own the mineral resource rights for it to be utilised because, like land, it can be processed for its use through negotiations and agreements. The current utilisation of forestry resources was also a case of resources being harvested while customary land was not registered for its purpose. Secondly, the argument that the state can fairly distribute the resource as its main reason for retaining mineral resource rights would be difficult to verify where few social services were provided to the people in rural areas. At best, the state retaining mineral rights gives a sense of security to foreign investors. At worst, where land kin groups become more aware of what they perceived as dispossession of their rights would mean such projects would never be secure. Clearly, in this context the state may act as a coordinator and regulator, but not necessarily as resource owner.

The Hansard accounts of the 1990 Mines and Mineral Bill give some indications of the problems facing the issue of mineral policy development. Hon. Allan Paul, Minister of Natural Resources, in his second reading of the 1990 Bill, pointed out a number of important issues about mineral policy in the Solomon Islands. The first point was that general knowledge about mineral resources is lacking. He demonstrated this by explaining how in Vella Lavella, at Paraso River, there was much confusion among the community. In one particular instance, people were collecting pyrites instead of gold, which led to the conclusion that there was extreme lack of knowledge (Allan 1990).

The second point is that even the government does not have the resources and capacity to prospect for mineral resources. The third point is the financial capital required to carry out prospecting, which even then is no guarantee of returns to investment. The fundamental basis of the government's position is summarised by the Minister for Mines and Minerals (Hon. Allan Paul) as,

..Mr Speaker, I would like to talk a little about the question of ownership. I have mentioned the question of mineral ownership. This is an area in which our armchair advisors have been particularly active in fanning the fires of confusion. According to them, the minerals should be private property and each landowner or group of landowners should directly own the minerals that happen to lie under this particular or their particular piece of land. I cannot stress strongly enough the dangers and the problems that such course could bring. It could lead to gross inequality in distribution of wealth within the Solomon Islands.... only through...centralised administration can be assured an equitable spread of benefits, adequate control of exploitation, containment of environmental damage and proper recording of mineral and resource assessment (Allan 1990).

The above statement by the Minister epitomises the logic of the current Mines and Minerals Act 1990 (NPSI 1990). The major difference with the 1990 Mines and Mineral Act in relation to preceding acts is the distinction made between ownership of surface minerals by the people and Government of the Solomon Islands and the ownership of surface rights by the landowners, and in addition, the mandating of negotiating rights for surface access fees, compensation for damages and the option for landowners to receive royalty payments.

It would be understandable to think that for practical reasons state ownership of resources allows for appropriate technical and financial management and administration of natural resources development. However, the placing of mineral rights under the control of the state, or what the Minister called 'centralised administration', was equally not a guarantee for equal distribution of benefits, containment of environmental damages, or adequate control of mineral resource exploitation. The incapacity of the state to develop the sector in the first place makes it no better equipped after rights were given to foreign prospectors. The process of negotiating access may be divisive as companies may use a divide and rule technique. This kind of technique is not unusual, as shown by a petition claim sent to the

Ministry of Mines and Energy in 1997 regarding a dubious process of negotiating access by a prospecting company (Bako 1997).

Clearly the state's view did not resonate with customary landowners' views. The government's attitude for state control of mineral resources only made more difficult efforts to consensus approach in policy development that would be designed to achieve similar ends.

The lack of state provision of services even to areas where resources have been exploited to raise financing for the state show the weakness of the minister's argument. One thing this parliamentary meeting showed was the lack of institutional development on the part of the state to deal with issues of land and mineral rights as understood by kinship based communities in the country. The Minister's argument reflects the state's attitude to its people when it comes to defining important issues such as land and mineral rights. To make things even more complicated, the 1990 Act stipulates that '...mineral resources belong to the state and people of Solomon Islands' (NPSI 1990). This ambiguous statement reflected the state's uncertainty in dealing with natural resources development policy. It has become so ambiguous that people often ask whether the wording 'people of the Solomon Islands' referred to customary landowners. The state easily uses this to mean both people of Solomon Islands generally as well as customary landowners.

The state, however, conceived that despite the ambiguous statement about mineral rights, the 1990 Act was seen as an improvement on the 1968 Act. The 1990 Mines and Minerals Act made provisions for appropriate compensation for land access and displacement (NPSI 1990).

It remains to be seen whether the state can effectively manage environmental control and social impact, especially when the state and the mining company are also interested parties in mining development. Hence, the issue of mineral resource policy remains contested in Solomon Islands. However, unless satisfactory ways of reconciling kin groups' believe that landownership and mineral ownership are one and the same, it will remain a central issue for landowners' claims of ownership right in mineral resources development in Solomon Islands.

For kin groups, the above position of the state on mineral resources simply demonstrated that post-colonial government was not different in its attitude to mineral policy. The post-independence state now had leaders who were interested in the control of mineral resources, because this provided them a way of dealing with foreign business groups. The surrender of the mineral rights to kin group leaders would deny national leaders of their chance to use their official position to serve their own various interests. Thus, mineral policy became a new basis for the new elite in Solomon Islands to canvas relations with foreign interests in the name of the people. In this sense, instrumental articulation has no racial boundary and the hope of kin groups further eroded trust in the state.

5.5 Gold Ridge development: 1994-1998

The development of the Gold Ridge project was done within the existing mineral resources policy. The development of the Gold Ridge project between 1994-98 was based on the Mines and Minerals Act 1990 (NPSI 1990). However, one practical change was the issue suggested by the 1990 Principal Act for royalty payments to kinship based communities. It was found at the time that there was no legal framework for administering the payment of royalties. The government in 1996 amended the Mines and Minerals Act 1990 to allow for the establishment of a government account beside the public finance account. This required the amendment of section 101 of the Constitution which enabled an account to be established beside the Treasury account for the payment of royalties to landowners. The Mines and Minerals (Amendment) Act 1996 made this provision (NPSI 1996).

The Mines and Minerals Act 1990 and the Mines and Minerals (Amendment) Act 1996 were the major policy basis for the process of development of the Gold Ridge project and the negotiation that followed. The Gold Ridge Mining Project development took place between the period of 1994-98. It took four years to go from the stage of declaring the project as potentially profitable to its commercial operation in June 1998. Like any other mining development projects, the Gold Ridge project underwent three major phases of development. Godoy divided these phases of mining development activities into exploration, development and production (Godoy 1985).

5.5.1 Exploration

The most recent Gold Ridge exploration was based on previous works. For example, the work of CRA Exploration Pty Ltd in the early 1970s found that mineralisation was contemporaneous with the volcanism. The idea was that the rocks were saturated and changed by hydrothermal solutions, which moved laterally through permeable layers. The mineralisation was thus closer to the surface. CRA knowledge was used for subsequent works by Amoco in 1983, Cyprus Minerals Solomon Islands in 1985 and Arimco in 1989 (SIG 1990).

A rise in world market prices for gold occurred during 1992. In the meantime, there was a large number of special prospecting licenses issued between 1982-87, yet there has not been any indication of any viable results. By 1987, there were 82 special prospecting licenses being renewed, issued or processed (SIG 1987). This increase in prospects declined significantly until 1994, when renewed exploration began to increase. The government reported 39 prospecting licenses in 1997 (SIG 1997). Although this seems fewer than the prospecting interests ten years earlier, it must be borne in mind that for a while there were very few mineral-prospecting activities, until 1994. The result of Gold Ridge project being declared marginally viable gave incentives for increased prospecting. For the state, the increased interest in prospecting from 1994 was welcomed, and the Gold Ridge project was supported to encourage international interests in prospecting in the country in general.

For the mining companies, prospecting has become a gamble, in particular where tenement access requires securing the support of the customary landowners. This is a tricky case because while the state holds the mineral rights, the Mining regulation requires that any issue of prospecting license requires the permission of the landowners (NPSI 1994). In the case of the Gold Ridge project, when Ross Mining NL acquired the Gold Ridge tenement in 1994, it was by then ready to carry out actual mining as the prospect had already been indicated as viable. This meant Ross Mining NL had to apply for a mining license, which required the development of a

feasibility study. Clearly, the exploration stage can be the most tedious process in mining development in Solomon Islands.

Ross Mining NL was also a marginal mining company with hardly any international mining experience. The Gold Ridge project was its first international project. It also had a reputation to worry about and consequently argued for an improved environmental approach to the development of the Gold Ridge project. This was seen as a good sign for a corporation, as most experience regarding corporate activities in the country had been hardly controlled, and relied heavily on the goodwill of the company. Under these conditions, Ross Mining NL proceeded with the application for the development of the Gold Ridge Mining Project. Any development required the issuance of a mining lease, which, in turn, required a feasibility study and other auxiliary approvals.

5.5.2 Construction and development

The feasibility study is considered the first step in the development phase of the Gold Ridge project. From the technical perspective, this is the most important task to be carried out by the mining company. For the state, a feasibility study is a statutory requirement for securing a mining lease. Thus, in April 1995, a feasibility study was begun by Ross Mining NL. A full feasibility study in this sense requires sufficient diamond drilling, metallurgical test work, resource calculations and geo-statistical studies. It also involves extensive site engineering investigation and environmental studies. The Gold Ridge feasibility study commenced in April 1995 and data collection was completed in January 1996. The first submission of the feasibility study was made on 11 October 1996.

It was in the consideration of the RTZ review of the Gold Ridge feasibility study submitted by Ross Mining that the Solomon Islands government was prepared to issue the mining lease. The Culshaw Feasibility Review Report of the Gold Ridge project wrote:

...On the basis of a combination of the original documentation and more recent clarification and amplification of topics insufficiently covered in the initial report that RTZC has been able to agree that, from a technical standpoint, the Gold Ridge project is feasible and should be allowed to proceed (Culshaw 1996).

The Solomon Islands government relied on the Culshaw Report to give the green light to Ross Mining for the approval of the feasibility study. The government relied on the recommendations of this technical report in its decision to allow the project to be implemented. However, the government could not seek a second opinion about the validity of the feasibility report because of a lack of financial resources. The kin groups too could not independently evaluate such feasibility reports for the purpose of protecting their own interests. In this respect, technical information was largely a foreign domain and the government too was ill-equipped for verifications of the accuracy and legitimacy of the report. In terms of the relationship between kin groups and the mining company in the areas of feasibility reports, the lack of skilled manpower on the part of kin groups made this area an exclusive domain of the company and those technical consulting companies who offer their consultancy services at high fees. This remains a risk area for kin groups and in some cases for the state where it is ill-prepared. On the 12 of March 1997, the Special Mining Lease was granted. This was the second Special Mining Lease issued after the 1937 Lease for the same project area.

5.5.3 Mining lease and mine operation

The issuance of the Special Mining Lease (SML) for mining operation was based on the viability of the gold deposits. The process for securing this Mining Lease for actual mining development was through a Mining Lease application. This process involved submission of a financing plan, specifications of any major ancillary authorisations needed for project development, and a feasibility study.

In terms of the financing plan, the government agreed that its statutory approval was required if Gold Ridge mining company Ltd was to sell its assets to recover costs to lenders as approved under the Project's financing plan. Under the financing plan, rights of lenders or developers of the project to recover their costs were subjected, and

limited to, rights of the developing company, the existing Mining Agreement, the mining lease and applicable law. Such conditions were important for the State as the project had involved financial lending institutions whose rights for recovery of losses had to be protected. The same could not be said for kin groups in making such conditional clauses to protect their interests.

In terms of ancillary authorisations, this involved the company listing all the necessary authorisations that they may require from the government to approve before commencing operations. This included issues like road construction, access authorisation, and water reticulation authority. There were rights for movements of highly flammable fuels to the mine sites. These and other authorisations were listed which made the government approval process much faster than usual. Apart from the financing plan and the listing of types of ancillary authorisations, the feasibility study was another major requirement for securing a Special Mining Lease.

The feasibility study was expected to show physical aspects of the mining lease area, the nature of mineral deposits, including grade and quantity, technological reports of ore treatment, a mining plan, an environmental impact statement, and a decommissioning program for the mining project when it is completed. The feasibility study was conducted between July 1995 and September 1996. The study showed that the Gold Ridge Mining Prospect was distributed over three main shallow pits, namely: Valehaichichi, Kupers and Dawsons. These three major deposit areas constituted the bulk of the area for mining in the mining lease area.

In terms of the nature of deposits, the study also revealed that the three areas of the deposits held at least one million ounces of gold. The average grade was 1.65g/t gold with a waste to ore ration averaging 0.8 during the life of the plant. It was reported that at the rate of 100,000 ounces of gold per year, the plant would process two million tons of ore. The project life was estimated to have a life of ten to fifteen years. In terms of mining, the method of mining would be open cut, while the extraction technology would be the standard carbon leaching process. This would involve, crushing, grinding, and leaching with the use of cyanide. The use of this extraction technology was believed to have an extraction recovery rate of 87.5% during the life of the mine. In terms of operational cost to produce an ounce of gold, it was estimated

for the market at A\$295 per ounce (US\$ 215 per ounce) The total capital construction cost of the project was estimated at about A\$64.5 million (Ross Mining N.L 1996), a relatively small amount by regional standards.

The study proposed that the company would adopt a high standard of environmental protection for the construction and actual operation of the mine. This was referred to as the 'Australian Best Practice'. The government had involved RTZ Consultancy Company of the UK and the Commonwealth Secretariat to verify the environmental standards. After seven months of going back and forth between the government and the mining company, the feasibility study was approved in 12 March 1997. This was the date the SML was granted. The case of technical and financial reporting took priority over the social and cultural dimensions of feasibility studies.

The Gold Ridge Mining Project did not start commercial operations until the middle of 1998. Ross Mining NL constructed the mine in the last twelve months starting in early 1997. The construction work involved road-works, forest clearance, and construction of the processing plant and the power station. These works were contracted to both local and international contractors. During this period, local employment increased sharply, but most local labourers were employed for unskilled jobs.

5.5.4 Operations

By the end of June 1998, construction was complete and operations began. Thus, the Ross Mining Report, for the quarter ending 31st December 1998, showed that the project had produced 45,487 fine ounces of gold and 47,143 ounces of silver. This was the first quarter report of production and sales.

The first report of the commercial production released by Ross Mining NL was seen as a positive outcome for the project. This was very exciting for the mining company as well as for the government as it was the first hard rock mining in the country. This was also a time of political change in Solomon Islands politics as a new government led by Ulufaalu took over from the Mamaloni government. The Ulufaalu government took office in July 1997. The effect of this change of government was two-fold. The first was that the change of government at a time of the completion of the Gold Ridge

project created an environment of competition for control between the two sides of politics. The Ulufaalu government was seen as opportunistic and had succeeded in taking over from the previous government at the time of completion of the project. On the other hand, the Mamaloni government implemented the project and was seen as having lost control when it should have remained to see through the development of the project. This situation created political instability that persisted until the emergence of the ethnic crisis in 1998. The second effect was on Ross Mining NL, who was looking to the government to celebrate the success of the Gold Ridge Mining Project but at a time of political change. The company was then left with a political dilemma in terms of showing their appreciation to the government. The issue was how much the company should be seen as recognising the Mamaloni government for implementing the project, when now a new government led by Ulufaalu was in power. Thus, this political situation had silenced the celebration. There were, in fact, no significant statements made by the new government or the landowners as to whether the report about the mine's first gold pour should be commented upon or not. This caused the company to become more cautious.

From the point of view of the state, at least the project was generally seen as successful. It was a marginal project after all. It was also seen as successful as the environmental issues were considered sufficiently catered for, although this depends on the monitoring capability of the state. The government was aware, or at least the Department of Mines and Minerals was conscious, that a high standard of performance expected of the company could only be made possible by a high standard of monitoring by the state. But at the time, as the country's forestry resources and the Asian market were declining, the opening of the mining project was seen as most timely. But not everybody thought this way, as litigation commenced on the day of the signing of the mining lease on 12 of March 1997.

5.6 Gold Ridge litigation and benefit sharing

5.6.1 Litigations

There were two litigation actions taken against Ross Mining NL after the signing of the mining lease. The first litigation by some of the principal landowners was filed one day before the mining lease was signed on 12 March 1997. This litigation was

Civil Case No. 60 of 1997 filed in the High Court of the Solomon Islands. Three out of four of the litigants were principal landowners from the Gold Ridge Kinship Community. These were Willy Roni, Isaiah Otto and Nelson Tave. The fourth was a downstream landowner and former politician, David Thuguvoda. Most of these figures featured in both local media and Australian print media. This litigation was, according to Slater & Gordon lawyers, seeking 'adequate compensation' as referred to in an article run in the *Australian Financial Review* (Main 1997). The Slater & Gordon law firm was well known in Solomon Islands after its involvement in the environmental case against the Broken Hill Proprietary Co Ltd (BHP) for the Ok Tedi people in PNG in May 1994. This was the claim for A\$ 4 billion against damages that BHP inflicted on the environment as a result of the mining project (Aditjondro 1996: 191). The basis of the first litigation in the Gold Ridge case was that the negotiated agreement between the mining company and kin groups was not constitutional. In other words, they claimed that the granting of the mining lease was illegal. This case was thrown out of court immediately because of a lack of legal grounds.

The second litigation filed on the 22nd July 1997 was Civil Case No. 169 of 1997. This was filed after two of the litigants withdrew their support for the first litigation. These were Isaiah Otto and Nelson Tave. As was reported by the media, the two litigants claimed they did not authorise their support for litigation in the first place (Howarth 1997: 16). The throwing out of the first litigation meant that the same plaintiffs couldn't resubmit the same case, so the second litigation focussed on environmental threats. Thus the 'paramount' chief of the Guadalcanal plain tribes became the plaintiff filing the case against the mining company. The case was made on behalf of the Ghaobata, Thogo, Lathi, Thimbo and Nekama tribes or kinship-based communities. This litigation was able to get support from conservation organisations, including the Australian Conservation Foundation Executive Director, Jim Downe (Earle 1997, Honeysett 1997). But this case too was not able to establish sufficient basis to make claims against Ross Mining's actions in meeting its environmental obligations, according to current statute. Thus, on Friday 19th December 1997, the High Court dismissed the case of Samuel Saki and John Maningelea of the Guadalcanal Plains. The High Court of Solomon Islands decided that the litigation proceeding was an abuse of process rather than a genuine grievance.

In all the complexity of the above litigation processes, a number of points have been indicated. For example, in the case of the first litigation attempt, two of the litigants, namely Isaiah Otto and Nelson Tave, were members of the Manugaravu moiety, under the Chacha descent group. The third litigant, David Thuguvota was not a member of any of the Gold Ridge kinship-based communities, although he was related at a higher kinship system level. The fourth litigant, Willy Roni, was a member of Rausere descent group of the Manukiki moiety. Thuguvota, a former member of Parliament, chief among his people, and a downstream community member, had distant kinship relationships with Gold Ridge landowners. He was influential in arousing discontent amongst members. His ability to convince the other three kinship-based community members to take litigation in the first place, especially on constitutional grounds, showed a gamble on his behalf as well as demonstrating that he should be configured in the benefit distribution from the project. Thuguvota's approach was a gamble in arguing that the agreements and the issue of mining lease were unconstitutional. His line of thinking stems from the requirement of the Lands and Titles Act, section 74-75 and 77 (NPSI 1981). Under these sections, the procedure for land acquisition for public purposes implied compulsory acquisition of land. In the case of the Gold Ridge project, this procedure was avoided and the normal adjudication process was carried out instead. This was to avoid the perception and connotations of 'compulsory acquisition'. This procedural change was used in trying to support a litigation of unconstitutionality as a final attempt to find means to claim more compensation. It appeared in the Gold Ridge project case that the kin groups most engaged in disputes appeared to be those seeking relationships of benefit-sharing from the project.

Benefit-sharing was a second choice for kin groups in a situation where their ownership of the resource had been futile. The idea of compensation arguments was construed in terms of damages and loss of property, which in their sense included land whether improved or not. Given the scale of the project in establishing infrastructure, kin groups saw the development as disproportionate even before the project started production. The mere scale of equipment used and buildings established was huge and never before seen in the area. This was in itself 'development', but all of which was under the control of the mining company. Thus benefit sharing was an essential issue to resolve.

5.6.2 Benefit sharing

These litigants against the Gold Ridge project were largely influenced by the perception of economic deprivation. A segment of the community was a long-time advocate for Guadalcanal control of resources and benefits. Their concerns were about what they saw as the relative economic deprivation of kin groups from most large scale natural resources development that had taken place on the Island of Guadalcanal. Clearly the issue of benefit sharing with kin groups from natural resource development was a significant issue.

The issue of benefit sharing in natural resource use has been a point of contention through most of its history. In the 1960s, in the process of the establishment of forest estates in the colony, this issue surfaced even with the first acquisition of Vangunu as a forest estate where the government acquired land and leased for a fixed term of 99 years. The government then used a rate of 6d per acre and an ex-gratia payment as 10% of royalty the state received from the forestry exploitation company. Landowners in Vangunu at this time were not all too happy about this arrangement, as reflected in a letter on behalf of landowners written by Kinio to the District Commissioner in July 1964 (Kinio 1964). The letter was simply asking why the state was paying their land and resource at lower rates if they were there to help them under a protectorate.

The discontent over benefits from the Vangunu Forest Purchase was not too unfounded. As the Secretary to the District Commissioner for Western District, Tony Hughes acknowledged in writing to the Commissioner of Lands, on 15 July 1964, that the people were not happy with the deal. Hughes argued that the Government should not delude itself, that the needs of the people must be reassessed (Hughes 1964: 1-2). In the same letter, it was pointed out that although people may not go back on their word to give up the land, their demands were silenced because they were told that the British Government had only sent two thousand pounds for Vangunu and therefore there was no need to demand any money other than what was offered.

It was under these early benefit arrangements that subsequent negotiations in Solomon Islands had their basis. Hughes' involvement in these early forestry

resources acquisition and development equipped him to come up with a 1976 Green Paper called 'sharing the benefits'. According to Larmour, this proposal by Hughes was the idea to apply two principles (Larmour 1989: 69). The first was the rate of investment return, which means it must be sufficient so that the investor was motivated to invest in the project. The second was that benefits to Solomon Islands community should be proportionate to the directness of effect of the investment on the lives of the people. In this sense the benefits to Solomon Islands communities should be in the following order in terms of direct effect:

- landholding group most directly affected
- then the immediate group of people living in the area, and
- then the whole population (Hughes 1976, in Larmour 1989:70)

In terms of the above formulae for sharing benefits among the Solomon Islands community, 'sharing the benefit' proposed that in per capita terms the benefit sharing ratio for a particular project was to be a 50:2:1 ratio. The landowners were to receive benefit through rent and the purchase of shares in the company. According to Larmour (1989: 70) the proposal for benefit sharing was not taken up officially, but it had been partially applied in development projects at the time. The cases of benefit arrangements proposed for the Rennell Bauxite project had proposed a 5% royalty to landowners and compensation for loss of land and crops. There was a disturbance allowance of A\$ 400 per person (Lamour 1989: 59). The case of Guadalcanal Plains benefit sharing in the Oil Palm Plantation was also another case in hand with investor share at 71%, the state share at 25%, and landowners' at 4%.

But clearly, in all these projects, the benefit sharing formulae with kin groups was disproportionate. Under such experiences, kin groups' general perception was that of marginalisation of their entitlements to a fair share in benefits from natural resources that they knew as theirs. The litigation brought against Gold Ridge project at the signing of the Special Mining Lease on 12 May 1997 was again about the issue of benefits from the project. Kin groups who support this line of thinking clearly recognise that despite the government's general claim that their interests were for the development of the community as whole, such claims could not stand up to the

historical experiences in which kin group rights were persistently circumvented. The fact that even such proposals as put forward by Hughes were not even considered goes to show that the interests of landowners in obtaining a greater share of their resources remains a major source of contention.

5.7 Conclusion

The history of mineral resources in Solomon Islands is also a history of relationships with kin groups. On the broader level of analysis, the imposition of the state was a significant factor in determining the nature of relations over natural resources in Solomon Islands. Like other natural resources, state declaration of sovereignty over the territory in 1893, and the establishment of state authority expressed through the appointment of the Resident Commissioner in 1896, were the bases for the instrumental articulation of relations over natural resources, including minerals. The State's attitude in seeing natural resources as distinct from the people who depend on it was also influential in the way natural resources were accessed. In the case of mineral resources, the instrument of the state that claimed control over mineral resources undermined kin groups claim to landownership under customary land tenure. Thus, on the broader level, the issues of kin group identities and rights within a new framework of the state was persistently at odds with state objectives that see above the 'heads' of kin group rights.

At a more specific level, whenever projects were carried out, the rights of kin groups and the nature of benefits to kin groups were often very unclear. In other words, apart from kin groups being perceived as entitled to compensation for being disturbed, their rights to development under those natural resources have been largely ignored.

The next chapters will look more in detail at the development of the Gold Ridge project in terms of the nature of the relationship with kin groups in the implementation of the project. But historically, the relationship between kin groups and the state was not consensual but rather tolerated by kin groups. The nature of benefits experienced in previous projects only brought confirmation that kin groups were not proportionately receiving their entitlements. What seems clear here was the recurrent justification of state and commercial activities for their sustained control of

natural resources. This only led to the contrasting effect of increasing distrust on the state.

Chapter 6

Institutions and interest groups

6.1 Introduction

This chapter follows on from the previous historical outline of the context of the Gold Ridge project. It shows the nature of the distinctive institutions and individuals that were important players in this particular case. These institutions include the state, kin groups and Ross Mining NL. But, as found in many mine projects, there were also other interest groups. These are the secondary interest groups whose interests were largely linked to the projects through attaching such interests to the primary players. As will be described later in the chapter, some of these interest groups, such as ‘island hoppers,’ play the card of appearing as the supporters of the ‘disadvantaged’ or landowners. In essence, as will be demonstrated in this chapter, key players in the Gold Ridge Mining Project had distinctive goals. Despite the intersecting goal of all players, who wanted to see the mineral resources converted into tangible benefits for themselves, what constitutes this benefit for each player differs. This difference of goals between the major players, also referred to as primary players, appears to be derived from the self-definition of each player’s historical roots. In other words, the kinship ideology was the basis for kin group self-definitions of what the projects meant for them. In contrast, the state and the mining company derived their self-definition and goals from the ideology of the centralised state. The development of the Gold Ridge project was, in a way, a process of competing articulation processes between different goals defined from different positions of interest. Interests, as defined in Chapter 2 of this work, refer to what makes a ‘difference’ to an actor in the scheme of things. Again as outlined in Chapter 2, this was where the role of ‘sign’ in actions was important. In other words, what does a mining project, as a complex event, mean for each player, and what difference is such an event expected to make for each player?

The next section of this chapter describes each of the primary as well as secondary players in the Gold Ridge project in Solomon Islands. It considers both institutions

and individual players who, in the process of implementation of the project, interacted in certain ways. Each actor pursues their own goals, but some were better positioned than others to achieve their interests. In the context of the Gold Ridge project, the state and company were in a superior negotiating position than the kin groups.

6.2 The state

The state in the Solomon Islands has not always been considered a 'democratic state'. The historical legacy of this 'democratic state' owed its origin to its colonial past more than one hundred years ago. This was when Britain declared some of the islands as a Protectorate in 1893 (Allan 1957, Laracy 1983, Naitoro 1993). Since then, a form of centralised control was developed. This was the beginning of the development of a new form of social organisation, that of the state.

The state was a new concept for most indigenous communities in the Solomon Islands. It was new in that it claimed centralised political legitimacy over a sovereign territory, much of which was under kin group control. The independent state not only inherited a politically declared sovereign territory, but also inherited a legal construction defined as the 'National Constitution' of this new sovereign state. This Constitution, which was prepared for political independence in 1978, was called the Solomon Islands Independence Order (NPSI 1978). This provided for the structure of the democratic state in the Solomon Islands. In essence, the democratic state envisaged for the Solomon Islands was largely a construction based on a global process, which inherited its features from a Western European model developed over centuries. Its main features were mass public education and industrialisation (Smith 1986, Smolicz 1985, Somers 1993, Szacki 1968, Williams 1991). But, as one commentator has suggested, the process of imposing the state throughout the world did not achieve uniformity, but rather was practised in many diverse forms (Williams 1991). In the case of the Solomon Islands, the model of state followed is supposedly that of a democratic state.

The presumption that the state in Solomon Islands was democratic was based largely on the terms of its theoretical provisions. These included the Constitution itself, as well as its provisions, which included the inherent features of a democratic state.

Among these are the notions of citizenship and the role of administration provided for under the Constitution. But the state in the Solomon Islands cannot, in practice, be called 'democratic' because the kin groups who constitute a significant part of the state had been in persistent disagreement with it since its imposition. This line of thinking was most obvious in relation to issues surrounding land tenure and the rights of kin groups. The circumvention of kin group rights in the Constitution was one of the most important areas of tension between kin groups and the state when concerning natural resources use. In other words, the existing state framework is at odds with the kin groups' interests it meant to govern.

6.2.1 Constitution

The state in Solomon Islands has three important characteristics. These are the Constitution, the structure of government, and the process of elections.

The Constitution laid the foundation for the structure of government in the Solomon Islands, including the election process. The institutional establishment of the post-independence Constitution was carried out in 1978. This Constitution provided for the ideals of democratic governance of the new state (NPSI 1978). Although it was designed elsewhere, was expected to be accepted as the 'supreme law' of the land. This is the case, despite it not being built upon kin group norms, hence the rhetoric that the Constitution was imposed rather than evolved.

The present Solomon Islands' Constitutional framework is outlined in fourteen chapters which are the fourteen key areas perceived as significant for the new emerging state.

The areas were:

1. the state and the Constitution
2. protection of fundamental rights and freedom of the individual
3. citizenship
4. the Governor-General
5. the executive
6. the national legislature
7. the legal system
8. the Leadership Code
9. the Ombudsman
10. finance
11. land
12. provincial government
13. the public service
14. miscellaneous topics and schedules.

(List of the main sections of the National Constitution of Solomon Islands. Source:
NPSI 1978).

The organisational framework and justifications for the state in the Solomon Islands were based on the fourteen sections of the National Constitution. Over the years, this Constitutional framework has often been treated as 'sacred' in that it has not been significantly modified by the National Parliament since 1978. Part of the reason for this lack of innovation has been the apparent lack of understanding by Solomon Islanders about the relationship between the Constitution as it has been written and the practice within the real world that it has been designed to govern. In other words, the Constitution is an imposition rather than a solution to any definite existing problems of governance.

The Constitution itself was seen as quite a simple construction. The first section on the state and the Constitution simply declares the Solomon Islands as a sovereign democratic state. The Queen is the legitimate Head of State with the Constitution being the supreme law of Solomon Islands and 'other laws' subordinate to it. In this sense, giving the Constitution an imposed set of values obviously created a condition for tensions between the values of the Constitution and those of the pre-colonial social communities with their own sets of values. Thus the Constitution could not, on this basis, be a morally and socially legitimate supreme law of the land. It would be consistently subjected to contestation.

The second section of the Constitution outlined the protection of fundamental individual rights. This encompassed: the individual right to freedom against slavery; the right against forced labour and right to life; the right to liberty, human treatment, property protection, free expression, freedom of movement and right to compensation for contravention of these rights (NPSI 1978). Yet, in the same Constitution, there are no detailed specifications of kin groups' rights as social units tied to specific land areas according to kin groups and land tenure. Instead of recognising the existence of kin groups, citizenship was assumed as the universal status for all individuals. The idea of citizenship is discussed much later in this chapter, but for now the point is that the social rights of kin groups have largely been ignored. The importance of all of these was that the state domination of kin groups was already laid down by the Constitution. Hence, kin groups persisted in their struggle for group rights in development projects. Clearly, a constitutional framework that ignores social groups, their associated social rights, and ill-defines their status has only provided avenues for future political contestation. In Solomon Islands, land tenure and forms of governance remain contentious issues.

The third section on citizenship simply described who could be a citizen, such as those who were citizens at the time of independence, indigenous Solomon Islanders, and anyone who successfully applies for citizenship. Also it provided for the prohibition of dual nationality in the Solomon Islands. This section will be elaborated on later, because of its implication for relationships over natural resources.

The remaining sections, namely from the fourth section to the tenth, were largely about the establishment of the apparatus of the state. This included the role of the Head of State, the Governor-General, section four and the Executive, which provides for the appointment of the Prime Minister and the role of the Cabinet which runs the affairs of the state (section five). Section six provides for the second component of the state, that of the National Legislature which involves the parliament and legislation process in parliament. The state machineries are part of the control mechanisms designed to sustain the state institution.

In the Solomon Islands, the country was divided into 50 constituencies upon which constituency representatives are elected to the parliament. Voters elect the representatives to Parliament every four years through a election process arranged by the Electoral Commission. A Prime Minister is then chosen after a national election as convened by the Governor-General, according to Schedule 2 of the Constitution (NPSI 1978). Thus, the legislature was the second important component of the apparatus of the state and was the law-making body of the land. The third component of the state apparatus was provided for in section seven, which deals with the legal system. It involves the application of law, the judiciary, public prosecutions, and the Public Solicitor. This component administers the judiciary process, through the institution of the court. Law under this section also implies customary laws. In association with the function of administration of social justice, there was also the office of the Leadership Code Commission in section eight, the Ombudsman's office in section nine, and public finance in section ten. These institutional appendices were supposed to provide for transparency and compliance to the requirements of the Constitution. In effect, the three components of the state apparatus, including subsidiary institutions for effective functioning of the state, made up the existing framework upon which the state is expected to function and represent the interests of the Solomon Islands people. The remaining sections, eleven to fourteen, were largely enabling sections for Land, Provincial Government, public service and a miscellaneous section dealing with appointment of public officers.

In summary, while the formal structure of the state contained many of the features expected of the democratic state, its effectiveness was undermined by the formal structure itself. For instance, the fact that kin groups were not recognised within the

framework of the Constitution meant that kin groups were expected to be citizens rather than kin groups associated with a specific territory. While the kin groups were not against citizenship status, they were also inclined to remain closely identified with kin groups where necessary. Thus, in essence, while the state struggled to impose citizenship as the basis for defining Solomon Islanders, Solomon Islanders defined themselves at different levels for different purposes. In other words, Solomon Islanders were as much citizens as they were members of kin groups, depending on the circumstance in which they had to define their identity.

Clearly the relationship between citizenship and kin groups, as a basis for defining the use of natural resources in Solomon Islands, remains an issue. At its core, this is a question of legitimacy on the part of the state. Does the state have more rights than the kin groups who were there before the state or rather should kin groups be left the freedom to construct the state and to give it its legitimacy including mineral rights ownership? In Solomon Islands, the state has so far not been able to engage social groups in effectively participating in governance of the Solomon Islands. This lack of effective engagement is vital as it impacts on relationships over natural resources. But it was the idea of citizenship that persistently authenticated the state's imposed rights over kin group resources and the distribution of benefits of resources.

6.2.2 Citizenship

The concept of citizenship can be traced historically to early Europe (Bauman 1990: 42, Brubaker 1989: 54, Brubaker 1992: 55, Mann 1987: 180, Marshall [1949] 1964: 181, Orloff 1992: 219, Somers 1993: 250, Znaniecki 1952: 286). There has also been much sociological study concerning the concept of citizenship. One of the major reasons for the concern for the study of citizenship was because of world trends, especially in terms of the resurgence of nationalism or ethnic conflicts. Generally, the sociology of citizenship agrees that citizenship in its modern sense was defined as a personal status consisting of a body of universal rights (i.e. legal claims on the state) and duties held equally by all legal members of a nation-state (Brubaker 1992: 55, Marshall [1949] 1964: 181). According to Somer's study of the history of the notion of citizenship in early eighteenth century England, citizenship is defined as an instituted process (Somers 1993). This means citizenship was a set of institutionally embedded social practices, and such practices were contingent upon and constituted

by networks of relationships and political idioms that stress membership rights and duties in a national community. In her view, this definition was contrary to the view that citizenship was a body of rights granted "ready made" by the state and attached to individual persons.

Somers' study of the historical development of the notion of citizenship in England was important in two ways, especially when such a notion became implanted and become a legacy of a colonised society. The first was that, for her, it was important to recognise that citizenship was a process. As a process, this notion has developed over time under specific social conditions and social relationships (Somers 1993:588). The second was that her study recognises that while the development of the notion of citizenship was a process in England, its application in colonised societies was more reflective of processes where citizenship was defined as a body of rights granted "ready-made" by the state and attached to individuals (Marshall [1949] 1964: 181; Brubaker 1989: 54).

The argument here was that this "ready made" set of rights was accorded greater political legitimacy over the social rights of kin groups. In this situation, issues of population movement, economic equity and political autonomy create tension between the idea of citizenship and kin groups. Thus, understanding of indigenous social rights embedded in kin group ideology and their application to customary land could have been better recognised, purposely, so that long term adjustments between the idea of citizenship and kin groups could be achieved. Further marginalisation of kin groups' social rights was achieved by the insistence on citizenship, which excludes kin groups' rights which will continue to cause disputes over these issues in the Solomon Islands.

Marshall rejected the initial limited definition of citizenship as a minimum body of legal and political rights and duties (Marshall [1949] 1964: 181, Brubaker 1989: 54). According to Marshall, modern citizenship involves three kinds of rights:

- civil rights (right to sell one's labour in a free market, and the right to due process of law),

- political rights (such as the right to vote), and
- social rights (such as the right to social justice through institutions like unemployment insurance, welfare provisions, education and social security).

The above three components of rights constitute citizenship status. Thus, the status of citizen allowed membership of a polity. However, it was the third component of Marshall's definition of citizenship rights namely social rights that was problematic in the case of Solomon Islands. This does not mean other component areas of citizenship rights were perfectly fulfilled. But for our purpose, it suffices to say that the critical issues relate to the marginalisation of social rights relating to kin groups. Thus, in the case of the Solomon Islands, the Constitution enshrined the rights of individuals in terms of a concept of citizenship which was reflective of the categorical rights of civil, political, and social rights. But, definitions of social rights fell short of taking into account the social institutions of kin groups reflected in the relationship of Solomon Islanders as a social group to their land--including mineral resources. The effect of marginalising the social rights of kin groups in the formal structure of the institution of state was that it had alienated kin groups in their own country. This is in effect an instrumental articulation of kin groups at the structural level.

Citizenship at the level of the state, and kin groups at the level of social groups, are mutual rather than exclusive for Solomon Islands kin group members. This means that the state in the Solomon Islands cannot exist in a beneficial way, unless some kind of relationship is established between expectations of the notion of citizenship and that of kin groups, which involves social rights of land, environment and culture. Here tension clearly exists between kin group-based communities and the state. Social rights of kin groups were undermined by a universalistic notion of citizenship, which justifies control under the instrument of the state. Administration thus constitutes an important institutional mechanism through which the state coordinates citizens.

6.2.3 Administration

The central government, which coordinates citizens, does so through three major structural coordination components: the legislature, executive and the judiciary. The

legislature involves 50 Members of Parliament elected every four years. This law-making body obtains its public legitimacy through the 50-member Parliament. One Member of Parliament is elected from each constituency. These constituencies are closely related but not necessarily synonymous with the 61 cultural groups in the entire country. The use of a multi-party system for general elections means that the elected members from any one party may propose to establish the government. Normally, coalitions are formed, as has been the case since independence. The party with the majority of members elected to Parliament may form the executive or the government of the day. Since independence in 1978, the country has had seven Prime Ministers. The formation of Cabinet, once the Prime Minister has been elected, forms the executive arm of the government for policy formulation and legislation. Each of the Cabinet Ministers appointed by the Prime Minister heads one of the government departments. The departments make up the administrative machinery of the state. Each Minister ensures that his or her portfolio implements Cabinet decisions, which are meant to be government policies. The judiciary aspect established under the National Constitution operates as independently as possible.

The central government in this respect is democratic in terms of constituency representation. It is also obviously hierarchical and demands adherence to the master-servant relationship in the daily operation of the state. This creates serious tension between individuals who do not see themselves as subordinates. The superior may be a cousin, a distant relative, a member of their local church, a friend or friend of friends, and therefore the idea of separating the official position of hierarchy to the equality of position among kin groups becomes difficult. This superior and inferior relationship in central government often translates to other relationships. For example, where central government officials see themselves as superior in the country, this leads to less acknowledgment of inferiors, usually village dwellers. This form of perception led to demand for further devolution of political authority to the provincial government level. In 1981, the central government passed a law to establish the provincial government on the understanding that this would allow local leaders to deal with the interests of their own respective province.

6.2.4 Province

Since the country gained political independence, although it retained the structure of the state, there have been attempts to modify it to fit into the demands of pre-colonial societies. However, attempts to synthesise state function with kin group objectives remained a problem because of the lack of political will to recognise kin groups' social rights in the context of modern influences.

At the organisational level the Government's attempts to articulate the state's organisation to cater for kin groups-based community in the form decentralisation has not been very satisfactory. Decentralisation of political power was an idea promoted at the eve of political independence and enshrined in the preamble of the Solomon Islands Constitution (Alasia 1997, NPSI 1978). Hence, there was the establishment of a provincial government system following the 1981 Provincial Act (NPSI 1981). This system initially set up six provinces, which have now become nine provinces. Each province then was given the authority to administer itself and make ordinances to fit the existing social system found in that particular province. The provinces in turn set up Area Councils under their authority. These Councils remained defunct in most cases in the Solomon Islands.

Thus in terms of decision-making in the Solomon Islands, the central government commands the leadership, at least as far as this is conceived by the legal statutes that define the state (NPSI 1978; NPSI 1981). In this context, unless issues are directly related to social groups in the Solomon Islands, the state appears as a foreign institution in terms of its positive impacts on the kin group-based community. Clearly, kin group-based community relationships with the state remain in tension in terms of defining rights, authority, and ownership of resources.

The provincial government was further seen as not able to provide services to the rural areas, thus leading to the demand for Area Councils. The Provincial Governments established Area Councils for political participation, but less thought was put into the financial viability of these organisations.

6.2.5 Area council

Local Area Councils are the third tier in the state organisation in Solomon Islands. Each province is divided into a number of constituencies and, in turn, each constituency is further subdivided into areas known as Wards. An Area Council is then formed through an election process where each ward elect one member to the Council. The elected members then elect their own President, Treasurer, and the Secretary. The Council has some legal authority but very limited authority over resources. In forestry for instance, the Area Council President is given the right to endorse or provide information about landowners and may verify their authenticity to act as landowners in signing legal contract agreements. This situation can be exploited by Area Council politicians especially when it relates to making deals with logging companies. Thus, it is clear that while decentralisation of the state may reach the level of community through Area Councils, such Councils are perceived as having no legitimate rights to discuss resources because the Area Council is seen as simply the state at the local level. Resource development must always be considered with the kin groups-based community. In the Solomon Islands, more than 87% of the land and its resources are held under a customary land tenure system but it is not this kinship system that formulates policy about resource use. In other words, there remains a political gap between the state apparatus and kin groups who see resources as theirs and separate from the state.

The state, as described above, appeared democratic and fulfilled the democratic requirements of the National Constitution. But this state structure assumed individuality for all citizens, at the cost of kin group communities and their very survival as groups of people with a specific territory. This process of individuation of social groups is not a problem in itself. What is a problem is its application to fragmented social groups and in the process accessing their natural resource assets. This has largely been detrimental to the group as whole. The state's policy assumption of the indigenous people as individuals rather than groups creates tensions between individual rights and social group rights that can only be addressed at the group level. The state's persistence in ignoring the rights of social groups is in effect an instrumental articulation strategy expressed both implicitly and explicitly. This

persistent state relation with kin groups undermines the kin groups structures in the name of democracy and development.

6.2.6 Implementation

The existing tensions between the state and indigenous community who perceive their social rights to land and resources as having been marginalised affects the way in which state and kin groups approach natural resources development in Solomon Islands. It meant that, the state in terms of implementation of development policy were usually guided by strategic manipulation techniques rather than a clear case of necessary collaboration. This was noticeable in the case of the Gold Ridge project development when the state approached landowners concerning issues of compensation and financial benefits to kin groups rather than seeking a consensus over the importance of the project for the country and landowners as a matter of economics and development.

Political leaders knew, over the years, that the issue of the mineral policy could not simply be enforced as contained in the mineral resources policy. The mineral may be claimed by the state, but this had never been accepted by the indigenous community. While the legal system legitimised by the state reserves the right to use of force against the community to maintain control over mineral resources, the recognition of kin groups and legitimate customary landowners made projects a real challenge for developers. As long as kin groups believe that mineral rights is a component of their social rights to land, and the state persists in maintaining control over mineral rights, the issue of fairness in project developments will be difficult to establish for kin groups.

The cautious implementation approach by the state to the development of the Gold Ridge project recognised this complexity. It began with the establishment of a Gold Ridge Task Force in 1994. The idea of the Gold Ridge Task Force was to localise the project within the Ministry of Mines and Mineral resources. Stephen Danitofea, then the Ministry's secretary, chaired the Task Force. The other relevant departmental heads included those from the Central Bank, Trade and Investments, Finance and the Prime Minister's Office. The Task Force carried out the implementation of the Gold

Ridge tender process and had to facilitate the Gold Ridge project. At the time, there was much talk about the possibility of the early development of the Bugotu Nickel Project on the island of Ysabel. There was concern raised by the landowners of this project about the fact that this had been going on for years without any report about whether the project would be implemented. In this environment of uncertainty, there was also talk about the need to establish a hydro-power project. The idea was that the Lungga Hydro Project, or any other possible hydro scheme including the Tina River east of Honiara, would provide power that could be used for nickel smelting. This line of thinking had some impact on the way the Task Force dealt with Ross Mining NL later in 1995. Denis Reinhardt, the spokesperson for a consortium interested in the Lunnga hydro project, was also prepared to support a hydro-project for the Gold Ridge project. This approach of trying to tie Gold Ridge with other possible projects caused disagreement among the Cabinet and therefore Danitofea was removed as Secretary to the Ministry of Mines and Minerals in January 1996.

On 12 February 1996, I was appointed by the Prime Minister's Office as the new Secretary to the Ministry of Mines. Now the six months period before this appointment I worked as a consultant in carrying out a social identification study of the Gold Ridge people. This research was seen as in line with my duty at that time as Solomon Islands Consultant for National Heritage. It was therefore seen that working in Gold Ridge before February 1996 was to the advantage to the national project.

As the new appointed secretary to the Ministry, I had to establish working relations with Hon. Jacob Vouza. He held the portfolio for this Ministry which was responsible for mineral exploration and mining development. The first task was to formalise the former Gold Ridge Task Force and to include other department heads. What the former Task Force did not do, was include the Attorney General. This revised Task Force became the Gold Ridge Advisory Committee. The importance of this committee was to be the link between the Cabinet and other relevant Ministries including Mines and Minerals. The Secretary to the Prime Minister, Joses Sanga was the Chairman of the committee. The other members of the Committee included senior representatives from the Ministry of Finance, Ministry of Trade and Investment, Central Bank of Solomon Islands, and Customs and Excise.

The main function of the Committee was to ensure that lines of communication between the Cabinet, the Ministry of Mines, and the Project were open and effective. The Committee was also able to coopt members when seen necessary. This Committee only met if necessary and usually for issues that implied government policy adjustments or change. One such major change was the amendment of the Mines and Minerals Act to provide an enabling clause to allow for the establishment of a government account for the disbursement of royalty payments to the landowners. The other major changes were the need for inclusion of *force majeure* clause, a provision that was intended to protect the mining company against government penalties if it did not meet its obligation where circumstance were out of its control. This was to apply if there were cases of a natural disaster or civil unrest. Thus, the importance of this committee lies in the link between departments dealing with the Gold Ridge project and the Cabinet, especially if there were needs for policy changes that needed Parliamentary endorsement. The Advisory Committee was the coordinating authority representing all the major arms of the implementing ministries to ensure the Gold Ridge project was facilitated fully. Apart from this decision-making role, most of the actual implementation of the Gold Ridge project was done by other subsidiary, but necessary, committees. There were two other important subsidiary committees that played significant roles in the implementation of the Gold Ridge project. These were the Gold Ridge Negotiation Committee (GRNC) and the Social and Environmental Impact Committee (SEIC).

6.2.7 Gold Ridge negotiation committee

The first was the Gold Ridge Negotiation Committee (GRNC). The Secretary of the Ministry of Mines and Minerals chaired the GRNC. As Secretary, my department was responsible for the Ministry of Mines, which was involved directly in the day-to-day implementation of the Project. The Division of Geology and Mines had largely put all its human and financial resources into the Gold Ridge project. The director of the division had a staff of ten, and as half of them were not fully qualified this meant that technical issues rested largely with very few qualified staff. The division was also expected to carry out facilitation processes for other exploration companies. At that time, there were 39 active tenements. A severe shortage of human resources was also experienced with the Ministry of Lands and Survey. The need to survey the mining

lease area, including the village relocation area, took less time because of the demand placed on the staff. Both the Divisions of Mines and Lands were fully engaged in the Gold Ridge project at the expense of other business development projects in the country. The problem of financial and logistics also meant that, in a significant way, the Ross Mining company was providing logistic support for government staff and reducing the independence of the government in the information dissemination to landowners and the public.

Other Ministries were also engaged because of the need to secure many other auxiliary authorisations needed by the project. For example, the Ministry of Works needed to give road access authorisation. The many different roles the various arms of the administration had to carry out meant that the Ministry of Mines and Minerals had to coordinate meetings with different departments. The Gold Ridge Negotiation Committee was the official committee for this, consisting of various relevant Ministries. The meetings that were usually held at the Central Bank's boardrooms were to update different departmental heads of the progress by the Ministry of Mines on the project. The financial aspects of the project were considered by the Central Bank and Ministry of Finance. The Ministry of Finance, through the taxation division, was responsible for the taxation regimes considered significant to the Government. The Central Bank was responsible for the regulation of external financial transactions for external repayment of debts. These financial considerations largely constituted the governments package for the Gold Ridge project.

6.2.8 Social and environmental impact committee

The second committee responsible for the implementation of the Gold Ridge project was the Social and Environmental Impact Committee (SEIC). The Director of Conservation and Environment, Mr. Biliki chaired this committee. His responsibility was to highlight issues of social and environmental concerns that arose as a result of the Gold Ridge project. While the Director's divisional duties arose in the category of environmental issues, social concerns meant a wider community involvement. Thus, the committee had to seek wider participation in the consultation process. There were representatives from the local NGOs, such as the Solomon Islands Christian Association (SICA), and Solomon Islands Development Trust (SIDT). In addition,

there were also relevant social Ministries such as that of Health, especially the Health and Environment division, the Solomon Islands National Museum involving cultural heritage issues, and Guadalcanal Provincial Cultural Division. The committee's function was to hold meetings with all communities involved in the project and raise those issues of significance to enable the government and the mining company to minimise the social and environmental impact. The committee's meetings held with the villages in Gold Ridge raised issues of a social, cultural, health, and environmental nature that concern to communities. In terms of all these issues, the village relocation program had to be developed to take measures to reduce this impact. The development of the relocation village was meant to be a response to social concerns raised by the committee. Environmental issues were mostly associated with the feasibility study, and in particular the measures proposed to reduce environmental threats. This related largely to the tailings dam and mining site containment. The committee was familiarised with the strategy taken by the company to deal with environmental concerns.

The issues which arose from both the Negotiation Committee and the Social and Environmental Impact Committee were then taken to the Gold Ridge Advisory Committee for endorsement. Both committees were central in information exchange and were essential for pointing out issues of relevance to the government, landowners, and the mining company. From the point of view of the state, central issues of finance, social and environment impact that had been dealt with through the program were discussed. For the mining company, once issues had been sorted out in the state-mining company consultation, then progress had been achieved. But for the landowners it was not quite so straightforward. In the first instance, social and cultural impacts were of such nature that they could not simply substituted through restitution. The environment will, after all, be destroyed and the villagers uprooted and relocated. This was a major social and cultural dislocation. The state and the mining company down played the issues of defining costs in terms of social and cultural dislocation, and instead spent most time justifying financial benefits as an end in itself. Due to the problem of not being able to justify ownership of resources by the state and the subsequent social dislocation caused by the mining development activities, mining would remain a contested area of development in Solomon Islands. So how the

landowners perceived this project becomes important if improvements were to be made in mining development project relations.

6.3 Gold Ridge kin groups

It is commonly known that there exists diversity in language, social, and cultural practices in the Solomon Islands. Such diversity is even reflected among groups in one island group. However, because of the relatively small size of many social groups commercial impacts were often similar between groups because they were all depended on the land for all their livelihood. Despite the variations, most social groups experienced similar impacts as a result of commercial ventures. The Gold Ridge kin group-based communities or Matoba people were no exception.

6.3.1 Villages

The Gold Ridge kin group-based community refers to a small collection of hamlets or villages in the central highlands of Guadalcanal Island. These people were scattered over the landscape of an area no less than 500 ha. There were 36 villages or hamlets identified during a 1995 impact study (Naitoro 1995:331). Some of the hamlets were however outside the immediate area required for the mining lease. In a company census conducted during 1995, the villages with a population that was to be directly affected by the mining lease were identified. The total number of people, initially 855, later increased to 1,200 as a result of returning community members. Community in this sense does not imply a particular specific settlement area but multiple settlement groups who share common kin group systems and land ownership. This is one of the reasons for using the notion of a kin group-based community to distinguish it from community in the sense of shared physical location or village. This does not mean these people do not have much in common. In effect, most of the 36 villages identified share a common heritage as members of two moieties.

Consequently, these people were collectively referred to as not only Gold Ridge kin group-based communities but also as the Matoba people or society. Among the Matoba population of 1,200 people, the sex ratio between women and men was about 45:55. There are more women than men (see table below).

1995 Census of Gold Ridge Villages

1995 Census of Gold Ridge Villages	
Total number of Villages in the Area	23
Total number of people	855
Total number of leaf houses	131
Total number of permanent houses	7
Total number of semi-permanent houses	11
Permanent Schools	1
Leaf class-rooms	3
Leaf staff houses	4
School office buildings	1
Permanent church (incomplete)	1
Semi-permanent church house	1
Leaf church house	1
Leaf store house	1
Semi-permanent store house	3

TABLE 2: Features of Gold Ridge hamlets in 1995 company census.

Source: Stevenson, (1996); Naitoro, (1995)

Apart from these demographic features of the Gold Ridge kin group-based community, they were also members of the different religious denominations found in the Solomon Islands. In particular, there were the South Sea Evangelical (SSEC), Roman Catholic, and Anglican Churches. The church has become an important part of the Matoba society, as a means of affiliation with the outside world. The church plays a significant role as a mediator of social codes between kin group systems of the Matoba community and outside values. For example, a lack of compliance to

traditional codes is often explained away as being due to the change of status necessary to be a Christian. Women were traditionally excluded in the traditional religious practices. Modern churches provided a way for women to reclaim the right to participate with men in religious activities.

The Matoba people, like many of their tribal neighbours, were frequent travellers. They were travellers as individuals as well as in groups, depending on demands of the time. This was the case if for example there were needs for gardening or as a response to natural disasters such as floods and landslide. There are other factors such as social tensions, which account for frequent movements. Since land was 'fixed' as collective rights of moieties, individual movements occur in the context of kin group relationships established through marriage. It is in this light that most members of the Matoba society trace their ancestors back to migration periods of their oral history (Naitoro, 1995).

6.3.2 Village economy

The Matoba people were subsistence horticulturalists. Before the arrival of the Europeans they were mainly engaged in taro and yam planting, especially for special occasions. Marriage and rasi feasts are exogamous in nature and in the past commanded gardening activities.

For the Matoba people, early European contact was at first sporadic, but soon became more frequent as exploration for minerals in the area increased over the years. This exploration pattern has affected the Matoba people since the 1930s. This is particularly the case with regard to the subsistence economy since the first mining license was granted in 1937 (Grover 1955) The subsequent exploration of the Gold Ridge was in the Matoba area, which led to additional people joining them. After World War II, exploration continued with Matoba individuals participating in the exploration activities. This led to local Matobans learning the skill of gold panning. The increased gold panning activities became an alternative to subsistence horticultural gardening for survival. The ultimate effect of this practice has been the significant decline in gardening activities among the Matoba by 1995 (Naitoro

1995:16) This was one reason why there were very few gardens found among the Matoba in the 1995 survey. In effect, the Matoba were dependent on alluvial gold panning.

In 1995, during my investigation of Gold Ridge social structure, I was able to observe that women did most of the panning. To the detriment of many women, their brothers often took off with their earnings for alcohol. But most women were able to earn enough from gold panning to buy bags of rice and tinned fish from Honiara's Chinese shops. The important role of women in gold panning can be demonstrated through one incident. In 1995 a Gold Ridge women lost about \$1,500 Solomon dollars from her hospital bed in Honiara. When she found that she lost her money, she left the sick ward and returned back to Gold Ridge to pan for more gold. Clearly, the Matoba people at the time of the Gold Ridge project initiation were heavily dependent on gold panning, and women had a significant role in alluvial gold panning as a means of subsistence.

6.3.3 Matoba society

The Matoba people are a relatively small social unit. The Matoba social unit is typical in terms of population size of any social group in Guadalcanal and elsewhere in the Solomon Islands. Matoba are typical in another dimension, in that not only are they a member of a specific kin grouping, but their social grouping can also be associated with other similar groups forming a larger linguistic group. A recent study done by Roe (1990) was able to list seven of the major linguistic groups on the Island of Guadalcanal as the Marau, Longgu, Lengo, West Guadalcanal, Talise, Malango and Mbirao. The Matoba people are sub-groups of the Malango major linguistic group. Malango is one of the seven such linguistic groups found on the island of Guadalcanal. Each of these major linguistic divisions has, in turn, further social divisions reflecting land, cultural and linguistic variations. Hence the Matoba people represent one of the categories of social grouping important in the Solomon Islands, as sub units of a major linguistic group. Using linguistic criteria, Tryon has identified 61 major linguistic groups comprising the entire indigenous population of Solomon Islands (Tryon, 1983). The population of the Malango linguistic group was estimated to be about 6,000 in 1995, by using the 1986 Census.

6.3.4 The Matoba kin group system

As a culturally self-contained group, the Matoba people inherited a traditional social organisational system described by anthropologists as moieties (Roe 1990, Allan 1957, Hogbin 1938). Moieties consist of at least two clan groups that are exogamous in relationship to each other. In the case of the Gold Ridge project, the Matoba society members are descendents of two moieties, namely Manugaravu and Manukiki. The names symbolise, as well as mean, 'big sister' and 'small sister' respectively in the system of moiety.

The importance of the concept of moiety is in its nature as an organisational system. This organisation system operates by dividing a society into two halves or moieties. On the Island of Guadalcanal, early literatures, such as Hogbin (1938) and Allan's report of 1957, reported the existence of moieties. For example, Allan mentioned the two moieties, Garavu and Manukiki (Allan 1957). The division of their society into halves allows for a reciprocal relationship. This means one half of the society is generally mutually obligated to the other half of society. It is the commitment accorded to this mutual obligation of reciprocal participation that defines the relationship. In other words, how much an individual can contribute matters because it shows the degree of importance if one contributes more to a reciprocal event. Such contribution signifies to the host the level of commitment to the tradition of mutual obligation to participate satisfactorily. A satisfactory participation is usually judged by the quantity of money or food one contributes to the reciprocal event in relation to others' contributions, and especially in relation to the contributors' recognised wealth. This perception is vital as the expectation of the host is based on the knowledge of perceived wealth on the part of the other contributing party. A participant's contribution is thus measured against that participant's perceived wealth status. Thus, if a contributing party contributes proportionately less than the level of wealth they are seen to have at their disposal, the consensus would be that of an unsatisfactory participation. During 1995, the listing of the names of the descent groups constituting the two moieties, namely Garavu and Manukiki were identified (Naitoro 2000). These are listed in the table below: Garavu and Manukiki.

GARAVU (Moiety)	MANUKIKI (Moiety)
Chacha	Charana
Chavuchavu	Halisia
Kaipalipali	Kaokao
Koenihao	Kolobisi
Lasi	Rausere
Roha	Sabaha
Salasivo	Sarahi
Soroboilo	Sutahuri
Vatuviti	

TABLE 3: List of the descent groups identified as members of the two moieties
(Source Naitoro 2000: 137).

Culturally, the importance of the relationship was based on the perpetual reciprocal relationship between the Manugaravu moiety and the Manukiki moiety. Each of these two moieties, not only symbolise 'big sister' and 'small sister' respectively, but also extend to represent 'big bird' and 'small bird' in the traditional cosmology structure. The 'big bird', which refers to 'eagle', and 'small bird' referring to the 'hawk,' established the distinctive identity of each moiety. The use of symbols of totemic representation was not unique to the kin groups-based community at Gold Ridge. This was a common cultural practice as found elsewhere in the Solomon Islands. The land holding (butubutu) distinction among the Marovo, in the Western Province of Solomon Islands, reported by Hviding is an example (Hviding 1996). Similarly, there was the arata or landholding unit and its use of common ancestor among the Are' Are of Malaita (Coppet 1982).

The importance of totemic representation in the case of the moiety in the Gold Ridge kin group-based community is the expectations of one moiety group member of the other moiety group. For example, a member of a Manugaravu moiety cannot marry another of its own members. Instead, they must choose their spouse from the

MANUKIKI moiety. This code established the expectations of marriage relations among the members of the two moieties. Apart from marriage, this code is also applicable in a reciprocity feast (rasi).

6.3.5 Matoba exchange systems

These reciprocal practices of Matoba people, such as marriage and the rasi feast are also adapted to modern circumstances, such as the application of this moiety reciprocity in the context of a mining project. One example is that of the application of the traditional reciprocity feast (rasi) to articulate kin groups. Kin groups are expected to share in the potential wealth that is expected from the development of the Gold Ridge Mining Project. To legitimise the tradition of obligation a rasi feast is held to show who remains committed to the tradition of mutual obligation among the moiety members. The level of participation in the feast legitimised those that held importance to tradition and who would in turn be recognised respectively in sharing benefits from the Gold Ridge Mining project. In the Gold Ridge case, Chief Willy Rone hosted a reciprocity feast (rasi) in 1991. As a principal member of the Rausere descent group, and a member of the Manukiki moiety, he saw it as appropriate to host a reciprocity feast to welcome other descent groups. The reason was the discovery of minerals on Rausere land. In this situation, for the complementary moiety group to share the right to benefit from the gold deposit, the other moiety was obligated to 'buy' their share to these rights. This was done through provisions of goods and valuables at the rasi feast as an act of reinforcing the traditional link and obligations of the moiety where the resources have been found. Here the idea was for the Rausere descent group to allow the traditional reciprocity feast to take place so that the entitlements of other moiety descent groups (Garavu) to the benefit of the gold deposit could now be respected (Dick 1991).

This rasi feast has in effect established the distribution of benefits from the mine because by 1996, when the Gold Ridge Mining Project was negotiated and agreed, both moiety groups were taken as collective landowners of the Gold Ridge project. As seen in Figure 1, both moieties are landowners to the agreement, although the minerals were largely found on the Rausere land. This finding has a number of

implications. The first is that the traditional code of reciprocity expressed in rasi ritual (feast) has significant meaning for both moiety groups. Part of its significance is the general acceptance of each other with the reciprocal relationship. The role of the rasi feast for the other complementing moiety is to allow its members the opportunity to demonstrate acceptance and commitment to a long term future reciprocal relationship between the two moieties. The assumption here by moiety leaders is that because one moiety is able to share gold wealth found on their land with the other, so the other is obligated to reciprocate likewise whenever they too may find wealth in their land. This obligation has no specific time limit.

What this demonstrates at the kin group level show that the relationship among kin groups is based on presumed equal reciprocation. Like the marriage system where marriage is exogamous, once a marriage takes place then equal reciprocation is obligatory for each party. Furthermore, the reciprocity implied is not limited by time but rather by the degree of compliance with the norms. While equal reciprocation is expected, this does not mean members necessarily exchange goods equally. Instead, it is the practice of generosity itself when social conditions permit, that is seen as significant. In other words, if a moiety member is presented with an opportunity to be able to give generously, then they should do so and not expect immediate reciprocation. This is because the same favour is expected to be returned in other situations that favour the other moiety members. It is in this form of reciprocal relations that relationships among kin groups are based. Thus, articulation in the form of reciprocation is based on recognition of difference and equality of difference. For example, the two moieties are seen as different but also as equals on their own right. The two moieties' relationship over material goods is then seen as a long term 'agreement' or obligation for mutually beneficial exchanges. The negative aspect is that equality in good things also means equality in bad things. Therefore, in an unfortunate situation of conflict, reciprocal violence is expected. However, the nature of the relationship is seen as articulatory where compliance with the rules and values of reciprocity is sustained.

Clearly, cultural codes of exogamous marriage, and the feast (rasi) practice are evidence of practices which influence the perception of whether a relationship is articulated or not among kin groups in the Gold Ridge project. It is the reciprocal

relationship within the context of the moiety system that legitimise the right for all groups to have a share in the Gold Ridge benefits. It is also what justified the inclusion of most landowners in the Matoba area in the Gold Ridge mining Agreements. What this practice suggests is that the interpretation of the project has taken place in the context of the moiety system. In other words, most kin groups included in the list of beneficiaries to the mine were justified on the basis of ideals of reciprocity. That is, reciprocity expressed through the exchange system, such as the rasi feast, marriage system, and moiety system for the whole society, remain important as the basis for forming expectations concerning resource use among Matoba people.

6.3.6 Matoba Land ownership

Land in Matoba society must be conceived of in relationship to the moiety system. Hence land ownership, as a feature of Matoba society is conceptualised in terms of 'people's land' rather than individual ownership. Since land is owned and used through kin groups, there is usually no particular landowner. This meant that the kin group owns land. A kin group defines a particular land holding unit in relationship to other kin groups. This system is common throughout the Solomon Islands (Allan 1957, Larmour 1989, Lasaqa 1968).

Landownership among the Matoba is far more than just a property ownership. It implies obligatory relationships which are central in understanding land rights. As mentioned earlier, the division of society into halves by descent (Allan 1957, Hogbin 1939) meant that concern about one half's obligation to the other, influences decisions made about land, marriage, and benefit distribution. Thus, land use has to be seen in relation to the moiety system (Naitoro 2000). The two halves, Manugaravu and the Manukiki, operate in a relationship based on mutual obligation that is grounded on common ancestors, referred to as the 'big sister' and 'small sister' respectively. In this respect, the social, economic and political relationship is articulated through reciprocity as defined by the moiety.

Clearly, land and resources are perceived in relational terms among the Matoba people of Gold Ridge. For the Matoba people, relationships over land use and now benefit sharing are associated with the kin group system as well as other affiliations

such as the church. The importance and practice of articulation in Matoba society is based around the two moieties. The division of society into two equal halves sought to maintain social relationships through the practice of exogamous marriage and the practice of the rasi feast. But more significant is the continuing expectations placed on relationships in the context of contemporary events like mineral resource development. For Matoba people, their cultural practices are important in shaping their expectations, as well as being the basis for the formulation of their relationships with others.

The implications of the moiety system of Matoba society in relation to contemporary natural resource development are found in their expectations of reciprocation. The fundamental principle is that exchanges between Matoba people and others must be seen as equal. As people with a language of their own and a particular worldview, their effective participation means effective articulation of development with their collective goals. The state, in its preoccupation with the notion of 'development', should not take things for granted when it begins natural resource developments that will transform people's lives. When this occurs kin groups' independence is systematically eroded by the state in the name of progress.

6.3.7 Matoba position

The implication for the moiety system is that when natural resource development occurs within such a society, natural reciprocity relations are assumed to prevail, the expectation is that there is a process of mutual reciprocity between parties, whoever they might be in a given situation. Thus, project development is seen as a reciprocal activity between the state and a kin group-based community on one hand, and between a kin group-based community and the mining company on the other.

Firstly, there was the expectation of reciprocity between kin groups and the mining company. The kin groups expect that they will be treated with relative importance and not just as if they are an inconvenience to state projects. They see themselves as landowners. This implies that the land belongs to their people as a moiety society but also that such a society is distinct not only from other related groups on the island but

also from that of the state and mining company itself. Furthermore, as a society, it has distinct norms, values and roles when dealing with natural resources which are part and parcel of their land in which they themselves are 'embedded'. In other words, kin groups are not only individual members but are also social groups with social rights. One of their social rights is that they are a group of people in their own right and that their rights deserve due consideration from any developer. This includes their rights to receive their entitlements in exchanges that involves their land and society. In this context the relationship between kin groups and mining company is expected to be reciprocal, where the two groups are seen as joint hosts of this 'feast' of the mining development project. Both the state and the company were seen as strong 'feast-givers' with the capacity to demonstrate their ability to distribute greater benefits to the Matoba society. However any distribution of benefits must at the same time, like any rasi feast, reflect degrees of importance or status in society. The significant individuals or groups in the rasi feast usually receive a level of benefits that reflect their position in society. These central figures were feast-givers themselves. In other words, central individuals in the Matoba society who, by their status as feast-givers, were 'equals' with the state and the mining company understood they were in a process of engaging in a 'reciprocal exchange'. The problem was that, to the state and the mining companies, landowners were not equals. They were considered as simply participants. Therefore, for the state and the mining company, it was matter of improving participation. For landowners, they were not simply participants who needed greater participation, they were an equal partner in the development. Thus, it was not the issue of participation that mattered, but rather the issue of the equality of positions within the society that dictated the distribution of benefits. It demanded an understanding of what constituted the total benefit of the project and how much of the benefits of the project were distributable. From there, who was to get what and why needed to be addressed. The uncertainty about this issue meant the landowners remained uncertain in terms of their attitude towards the project and therefore their exclusive support for the project also remained uncertain.

In the Gold Ridge project, there were several demonstrations of the landowners' perceptions of their relationship with the state and the mining company. The first instance was the hosting of several rasi feasts at the Gold Ridge area. One particular case was important. The rasi feast held in 1991 was held as the basis for bringing the

two halves of society together. The idea was for the sharing in the distribution of benefits. Unfortunately, the benefit from the project was simply a royalty payment. The payment did not seem to have any link to the total benefit outcome from the project. Therefore, royalties remained unclear with respect to its role as the major source of landowner benefits.

The second demonstration reflecting the landowner's perception about the project as based on reciprocity was the landowners' highlighting of five principal landowners. The mining company's response was to allocate already bought company shares for each of these principal landowners. Such benefits did not show the importance of the five principal landowners and their position as equals. The impression was that they were simply being 'bribed'. This would not make any public demonstration of the importance of these principals. Clearly, even when a handful of landowners were given a portfolio of shares in the company it was seen as of little importance to meet expectations of the landowners.

The third demonstration of this perception occurred when one of the principal landowners demanded his village house to be of a better standard and quality than those the company had build for the rest of the landowners. After almost a year of confrontation in the media both locally and overseas, the principal landowner Willy Rone was built a house. Although it was raised a few more feet off the ground, the standard was not acceptable when compared to people from town who owned no mining shares but lived in better housing. Clearly, the principal landowner groups among the Matoba society saw themselves as equal to the state and the company due to their ownership of land and its associated resources. For them, the mining project was an interdependent activity where the landowners were as dependent on the state and the mining company as these parties were dependent on kin groups for the extraction of resources from their land. Therefore, it was not only the issue of the distribution of benefits that was not clear to kin groups, but also their perception that kin groups were short-changed in the distribution of benefits to landowners from the mining project. In other words, the mining project did not perform to the level of reciprocal exchanges expected of such a large-scale activity.

6.4 Ross Mining NL

Ross Mining NL was the mining company that eventually carried out the Gold Ridge Mining Project. Ross Mining NL was the parent entity or holding company. As a holding company, it has other "controlled entities" or subsidiaries. For example, apart from the parent company (Ross Mining NL), there were the subsidiaries such as: Ross Mining International Pty Ltd, Ross Mining (Solomon Islands) Ltd and Gold Ridge Mining Ltd.

Ross Mining NL as a company was founded in November 1986 by Lambertus de Graaf, an Australian Dutchman. The company was listed on the Sydney Stock Exchange in 1987 as a gold exploration company. The company confined most of its work to Australia, starting with the Belyando Gold Mine, producing its first gold bar in March 1989. Ross Mining NL expanded through acquisitions of other mines in the Northern Territory, Queensland, and New South Wales. This included Wirralie Gold Mine, MT Coolon, Glen Evan and Yandan in Queensland, Timbarra in New South Wales, and Spring Hill in the Northern Territory. The company started gold production in Yandan in 1993. These Australian tenements increased the company's resource base to over 1,250,000 ounces. The company was debt free and had cash in hand of A\$11.6 million by the end of the 1994 financial year (Ross Mining NL 1994).

Ross Mining NL would be considered a small mining company in the context of the mining industry. But with its clean record, it sought to expand and therefore submitted a tender for the Gold Ridge project in 1994 in which it lost the bid to Saracen Minerals (Solomon Islands) Pty Ltd. Saracen, which won the bid, was a gas company that knew little about gold mining and sold the Gold Ridge project tenement to Ross Mining NL at the end of 1994 for over A\$6 million. This was one of the fears of the landowners, which the government could do little about.

Ross Mining NL proceeded to facilitate the Gold Ridge project. Through its subsidiary, Ross Mining International Pty Ltd, it registered Ross Mining (Solomon Islands) Ltd in the Solomon Islands as its locally registered company. The Manager, Eugene Illiescu, was the company's field man for the implementation of the Gold

Ridge project. The founder of Ross Mining NL, Lambertus de Graaf, was the Executive Director based in Brisbane, and he only made trips to the Solomon Islands when required. The parent company's interest was implemented and carried out by Ross Mining (Solomon Islands) Ltd.

6.4.1 Ross Mining (Solomon Islands) Ltd

The Manager, Eugene Illiescu worked closely with landowners and government staff in the field. The most demanding issues were the need for exploratory drilling, land access, land surveys, and land adjudication in preparation for the demarcation of the mining lease area. In terms of diamond drilling, most of the work was carried out through the Ministry of Mines drilling division. The Land departments, including land valuation and land adjudication, did land surveys. The lack of logistical resources for government officers, especially in terms of transport to the mine site, meant that the government made two vehicles available. But this was not enough in terms of the speed demanded in completing these jobs. Thus, the company also used several of its vehicles to move government officials to the mine site. The landowners were also engaged in numerous meetings, especially between the landowners and the mining company. This high level of company attention to the landowners was seen by some as 'better treatment' by the mining company, and it led to landowners suggesting that they could reach their agreement with the mining company separately. One instance of this was over the issue of housing. For some time, the landowners thought that the company would provide good housing for them without requiring any due process with the state. It came to the stage where a model house was built for landowners to look at, and once they were happy that model would be used for a village relocation program. There were complaints about its size and practicality though, and thus the issue came back to the government. I went to have a look at the model and suggested that it be revised. The revised version never came back to the government as the landowners agreed with the company that they were happy with the revised model. This was an instance where, when the landowners complained again, the government requested information on who agreed on the house and there were indications that the landowners agreed with the mining company.

6.4.2 Ross Mining and landowners

Company and landowner relations began to improve only after the formation of Gold Ridge Landowners Association (GRLA) at the beginning of 1996. This process is discussed in later in Chapter 7. The point here is that both Ross Mining and GRLA worked closely together only after the formation of the Association. The company was able to discuss matters of compensation and other claims that arose among the landowners. The mining company had always insisted that compensation claims of any type had to come through the Association if they were to receive company consideration. This had created divisions between Association members because the Association officials acted as mediators between the people and the company. Information could be misconstrued in the process of passing decisions back and forth between landowners and the company. For example, there was the instance where the company manager was said to have insulted the landowners by saying their chiefs were stupid because as chiefs they should tell their followers what to do. The insult had occurred during one of the heated debates about the issue of compensation. The landowners came to the government demanding that the mining company pay compensation for its insult since they believed they were not stupid, but rather that the company was stupid in trying to 'steal' their resources in front of their face. They demanded that without a compensation payment the mining project was off and Ross Mining could go home. The government called a meeting and the mining company and the state paid SBD \$100,000 for the insult. It was considered a serious matter that if this issue remained unresolved it would cost the company and the state millions of dollars. In effect, the company was not only dealing with establishing mineral resources but also with social issues of benefit distribution well before the project's geological resources were established.

6.4.3 The Gold Ridge resource

From the point of Ross Mining, the Gold Ridge project was extremely important to the company. The issue of establishing the resource was paramount to Ross Mining (Solomon Islands) Ltd. As a small mining company, the resources at Gold Ridge had many implications for Ross Mining NL the need to expand its reserves was necessary in terms of its status as a mining company. The Gold Ridge project made this upward revising of Ross Mining NL Pty Ltd from a small mining company to a medium sized mining company. This was shown through the comparative statistics of the mineral resources and reserves between its previously held tenements in Australia and the inclusion of the Gold Ridge project.

	RESERVES		RESOURCES	
	June 1996	June 1995	(Includes Reserves)	
	June 1996	June 1995	June 1996	June 1995
YANDAN	170,800	235,000	204,700	262,400
Mt COOLON	11,300	46,600	35,200	68,200
WIRRALIE Oxide	148,200	148,200	245,500	245,500
Sulphide	-----	-----	379,500	379,500
SPRING HILL	-----	-----	328,000	362,300
GOLD RIDGE	1,035,000	940,200	1,628,000	1,480,000
TIMBARRA	248,700	-----	453,000	-----
GLEN EVA	57,000	-----	70,000	-----
TOTAL	1,671,000	1,321,700	3,344,000	2,797,900

TABLE 4: RESERVES & RESOURCES EXPANSION (CONTAINED OUNCES)
SOURCE: ROSS MINING, NL, ANNUAL REPORT 1996:13).

From the table above, it is clear that Gold Ridge accounted for more than 50% of Ross Mining NL's gold resources and 60% of gold reserves. The 1,035,000 ounces of

gold reserve established the basis for the mining development of the Gold Ridge project. There were subsequently further gold finds which increased the gold reserves more than 500,000 ounces of gold and which meant the extension of the project was likely. These reserves and resources must be considered not only in the context of the Gold Ridge project and its locality, but also in terms of Ross Mining NL's performance to its shareholders in the international market.

6.4.4 Shareholders

A mining company as a corporate body has more important considerations than just the environment in which it operates. This refers to shareholders, who are also a diverse group. For example, in the case of Ross Mining NL at the time of its engagement in the Solomon Islands there were 4,000 reported shareholders. Shareholders were involved within as well as outside of Australia. The most important of these investors were corporate and institutional bodies themselves. For example, in the case of Ross Mining NL, Todd Corporation of New Zealand owned 14.6% of Ross Mining NL Shareholding. The top 20 larger shareholders held over 75% of the shares. The rest were from other smaller institutional and personal shares making the market capital of Ross Mining about \$200 million in 1997 (SIG 1996).

The interests of these shareholders were the dividend payments made to them at the end of the financial year or any time the Directors of the company saw as necessary. In the mining company itself, as in the case of Ross Mining NL the founders of the company were also important shareholders, as well as taking important an leadership role in the development of the company. In this context, it will always be the primary interest of the company to secure profitability. During the life of such a company, dividends may not be payable because of the financial standing of the company and the Directors may recommend against dividend payments, as made at 31st December 1999 by Ross Mining NL

The importance of describing the shareholder component of Ross Mining NL is to show that in the local environment in which mining operations took place there was little consideration given to shareholders. It was this 'hidden' component that was often under-represented in mining development projects to landowners. In Solomon

Islands, the landowners assumed ownership of the project on the part of the operating company such as Ross Mining NL. Clearly from the perspective of shareholders, a mining company could never be able to completely satisfy landowner demands in any mining project. While this seems too negative, it could be an important factor for landowners to understand, so that where decisions are made for project development their expectations should take into account shareholder roles and expectations whose capital has been put together by a mining company to carry out the project. In other words, shareholders and the operating company were two important and distinct players whose interest assumed priority rating over and above the state and landowners. The company-shareholder relationship is so interdependent that they often are considered as one player in dealing with resource development in a host country. The protection of the company-shareholder position formed the basis for the company's interest, and therefore as long as this configuration remained, the state and landowners would have to in their view settle for second place in resource development, unless they were prepared to develop the resource themselves.

6.5 Other players

The Gold Ridge Mining Project had also attracted other interest groups in the course of its development. These other players were separate from the core stakeholders of the state, mining company and the landowners. These other interest groups were mostly individuals.

6.5.1 Individuals

Individuals, in this case, refers to members of the community who act as though they are representing the interest of a wider group, but in the process are found to be acting on their own, or on behalf of a narrow interest group. During the development of the Gold Ridge project, between 1995 and 1998, there were several individuals who became prominent as opponents of the project. Their opposition became public knowledge through their appeal to the local media in the Solomon Islands, as well as overseas media. These were Willy Rone, David Thuguvoda, and Billy Gatu. Denis

Walter Reinhardt, a Brisbane-based entrepreneur was another individual who joined the local opponents. The association of these different individuals was central in their strong opposition to the Gold Ridge project between 1996 and 1998. Opposition to the project persisted through the period of project development and was usually instigated by individuals who claimed some leadership role in the community. This section outlines the roles of these players and their associates in the Gold Ridge project development.

Willy Rone was one of the principal landowners of the Gold Ridge project. He has become a 'paramount chief' since the development of the project. Although until 1995 he had lived in Honiara, he still remained one of the principal landowners. As a member of the Rausere sub-clan of the Manukiki ('small sister') moiety of the Matoba society, the discovery of one of the major gold deposits on Rausere land had enhanced his status as an important principal landowner for the Gold Ridge project. The current speaker of the Solomon Islands National Parliament, Mr. Paul Tovua was a member of the Rausere land and was therefore closely related to Chief Willy Rone. The importance of this deposit made him one of five principal landowners of the Gold Ridge mining lease area. It was also the principal reason for which Paul Tovua had also been co-opted into the Board of the locally registered subsidiary of Ross Mining NL namely Gold Ridge Mining Ltd. In essence, Willy Rone and Paul Tovua had been at the forefront in the dealings that involved the state and the mining company.

In February 1996, the government of Solomon Mamaloni carried out another administrative reshuffle, which resulted in the movement of some secretaries from their existing line ministry. This included Stephen Danitofea, a qualified geologist in the Solomon Islands, and the Permanent Secretary, being removed from the Ministry of Mines and Minerals. Stephen Danitofea knew Willy Rone through their membership of the South Sea Evangelical Church. The removal of Stephen Danitofea, whom I replaced him, was not popular. There was a common knowledge in the Ministry that the landowners, meaning Willy Rone, were not happy with the replacement. This led to the submission of a drafted letter to the Minister of Mines and Minerals, Hon. Vouza, and copied to Prime Minister Mamaloni that stated that the five principal landowners of Gold Ridge were not happy with the change of Permanent Secretary. This letter was signed by all the principal landowners. The

Deputy-Prime Minister Francis Saemala had also sent a letter of concern in reply to the Prime Minister. I was called by the Prime Minister's office to give a brief on the latest development. None of us, including my senior staff, were certain about this issue, but it was learned that there had been discussions between the deposed Permanent Secretary and Willy Rone. This relationship continued until late into the project. This collaboration came to head after a group of the Gold Ridge landowners (who had then excluded Willy Rone) demanded government explanations. The government was asked to explain why Stephen Danitofea had used the government office to introduce Willy Rone to Slater & Gordon lawyers during official hours to take litigation against the government and Ross Mining (*Solomon Star* 1998). Slater and Gordon lawyers were responsible for the high profile lawsuit against Ok Tedi and BHP in PNG in 1994 to 1996.

The other dimension of this relationship was that, in 1995, when Stephen Danitofea was Secretary to the Ministry of Mines and Minerals, Barclay Mowlem Ltd was given a government mandate to carry out the Lungga Hydro-Scheme. The recurrent power failures in Honiara township, as a result of lack of electricity capacity, made such a Hydro-Scheme a priority project. By the end of 1995, the mandate had not progressed much further. At this time, Denis Reinhardt came to the Ministry to check on the state of the mandate and informed the government that his company would now be coordinating the mandate. Mr. Reinhardt had come as the Executive for the Brisbane-based Merthyr Holdings Ltd, as one of the three parties in the Lungga Hydro Consortium. At the beginning of 1996, the consortium had assumed that the 1995 mandate by the government to build a hydro scheme for Honiara had remained unchanged. The consortium did not seem to realise that the mandate had expired at the end of the year. A conditional clause that they had included suggested that if either party had not pursued the progress of the project by the end of the year, neither party was responsible for termination. Therefore the mandate would be considered null and void. In 1996, this hydro mandate was reviewed by a task force, which was meant to overlook the Hydro-Scheme project. What the taskforce found with the 1995 mandate was that it had given all indemnity to the consortium, but that there was no protection for the government where the consortium was at fault. The revised mandate was then sent to the consortium. A request was made that if they were to accept or make suggestions to the revised mandate they had to reply as soon as possible. The

government also stated that if replies were not received, it would be assumed that the consortium was no longer interested in the mandate. There was no reply until 13 December 1996, when it was found through the media that Denis Reinhardt had signed a Memorandum of Understanding (MOU) with Solomon Islands Electricity Authority (SIEA). The Chairman of SIEA, Billy Gatu, had signed the MOU with Denis Reinhardt committing the government to purchase three 1.5 MW high speed Wilson generators. This had caused conflict between SIEA as statutory body and Ministry of Mines and Minerals as its parent Ministry. I took up the issue to the Cabinet and this led to the sacking of the SIEA Board chaired by Billy Gatu. An attempt to stop the three Wilson generators, which cost more than SBD\$ 8.4 million dollars, a price twice the value of the second hand generators, was not successful. This was because of the intervention of the Minister of Development and Planning, Francis Saemala (Solomon Star 1997). The generators were found to be defective and have subsequently been widely criticised in the media (Mosia 1998, Ono 1998).

By October 1996, Denis Reinhardt had met up with another local person. This was David Thuguvoda, who had recently lost the national election to Jacob Vouza, the then-Minister of Mines and Minerals. David Thuguvoda was well known in the Solomon Islands media and also the public. He was one of the early Ministers of the first independence government in 1978. He had over the years been struggling to get back to the government, but with limited success. One of the major projects he was directly involved in was the joint venture between the Solomon Islands government and the Commonwealth Development Corporation (CDC) of UK. The joint-venture company was the Solomon Islands Plantation Limited (SIPL). This oil palm plantation development started in 1972 as a project to prepare the Solomon Islands for political independence in 1978. It was implemented on the Guadalcanal plains where David Thuguvoda was a tribal landowner. Throughout the years, David Thuguvoda had tended to obtain the credit for facilitating the SIPL project. Due to its need for manpower, it had created numerous jobs. By the time that Gold Ridge project had taken off in late 1996, David Thuguvoda had joined forces with Willy Rone and Denis Reinhardt in opposing the project. Their concerns ranged from inadequate compensation, rights to provide electricity to the mine, and the downstream communities' fear of environmental pollution from the tailings dam.

Denis Reinhardt had become the coordinating person for David Thuguvoda, Willy Rone and Alfred Maeke to seek legal assistance. There was a heated debate in the media on the role of these individuals, and Denis Reinhardt. This led to articles published in the local media print demanding Alfred Maeke and the like explain their association with Reinhardt. The public became suspicious as demonstrated below in the local media. For example,

.. If he has had no relationship with Denis Reinhardt in Lungga projects or the Gold Ridge Court Case, then how does he explain Denis Reinhardt? For example (i) Denis organising Slater & Gordon to act as his lawyers in the litigation. (2) Organising and paying for visits of litigants to Australia on frequent basis. Paramount chiefs Saki and Willie Rone and David Thuguvoda were always included. (3) Write press statements and letters to Ross Mining shareholders concerning the litigation. (4) Personally attending press conferences with Maeke and former litigants Thuguvoda and Roni in Brisbane, Sydney and Melbourne. (5) Arranging legal assistance for Billy Gatu and the provision of a full time assistant, Donna Bath, to help Slater & Gordon and the litigants (Maneka 1998).

By this time, there was more information about the Brisbane-based entrepreneur. There was information about his role in Papua New Guinea and who he was before coming to the Solomon Islands.

6.5.2 Island hoppers

Denis Walter Reinhardt would qualify as an 'Island hopper' in the contemporary sense. Before coming to the Solomon Islands, Reinhardt had been deported from Papua New Guinea in 1994 (Kone 1994, Korimbao 1994, Kulu 1992). The government of Papua New Guinea had been trying to deport Denis Reinhardt for some time. During 1992 the PNG government had advised all its missions and posts that Denis Reinhardt had been instructed to leave the country voluntarily. The reason given by the division of Immigration and Citizens was that when Denis Reinhardt entered the country he came on a business visa. But it was claimed that he had abused his visa conditions when he had involved himself with the Mount Kare landowners group. He had caused divisions among the landowners' development company, and other landowners (Kulu 1992). Reinhardt was known to have entered the mining

business in 1986, when he acquired several companies as personal investments. These were Yaramin Pty Ltd, Fortescue Media Pty Ltd and Trendell Nominees Pty Ltd who purchased approximately 13% of AuGold NL (Kulu 1992). These projects had all failed.

During the Wingti government in PNG, he was employed as an adviser to Wingti. They had been personal friends before Wingti became Prime Minister. At the time, CRA, an Australian mining company, was involved in the development of Mount Kare. At the same time another Australian mining company, Ramsgate Resources of which Denis Reinhardt was a key shareholder, also wanted to control Mount Kare. Ramsgate Resources was said to have used \$3 million dollars towards a legal battle for some of the landowners and thus divided the landowners. The dispute became problematic and CRA left. Thus Ramsgate resources took over the project, but disputes remained and Reinhardt was said to have negotiated a substantial benefit deal for himself if his company took over. This was later exposed, which led to his expulsion from PNG (Eremae 1998, Kone 1994, Korimbao 1994, Kulu 1992).

In the Solomon Islands, after his signing of a MOU with SIEA in December 1996, he became a close associate with those opposing the Gold Ridge Mining Project. Later in 1997, he was also deported from the Solomon Islands. His association with both Willy Rone and David Thuguvoda led to two legal suits against Ross Mining, but these were not successful (Eremae 1998). Willy Rone and David Thuguvoda became frequent flyers to Australia and back to the Solomon Islands in getting Slater & Gordon to take their case. After nine months they were disgruntled and Willy Rone and Thuguvoda turned their back on Slater & Gordon and Denis Reinhardt. In changing their position, they declared they were misled, was sworn in an affidavit before a Melbourne Lawyer, John Nicholas Zigouras (Eremae 1998).

There were two other downstream landowners who had tried to take the litigation further but were not successful. These were Samuel Saki and Alfred Maeke, who filled the places left by Willy Rone and Thuguvoda.

Clearly, these diverse individuals and corporate representatives were also significant players. In the combination of local landowners, government officials and foreign

interest groups, different interests were at play and most were attempts to claw benefits from the project.

6.6 Conclusion

This chapter described the nature of institutions and individuals involved in the Gold Ridge project development. The importance of this chapter lies in the attempt to demonstrate that the state, as found in Solomon Islands, and its role in resource development, remains contentious for kin groups. The role of the state as representing the interests of citizens comes up against the issue of costs to kin groups not only in terms of material benefits but also the cost in not recognising their social rights as people. Thus there existed a tension between the state approaching natural resource use through the ideology of citizenship and kin group ideology as the basis of many kin groups, which define their social rights to resources. This tension was well recognised by the state. The state's approach to reduce this tension was to approach the project through a wider consultation process. In establishing several working committees and sub-committees, the idea was for the state to engage as many interest groups as possible. The state used these committees to ensure it sought out the most contentious issues and found means to rectify them.

The state, while concerned with the social rights of kin groups, as expressed through issues raised by them, gave priority to the concerns of the mining company. This was due to the state's need to meet its demands before committing to the project. Ross Mining NL was the company that took up the project. But Ross Mining NL, too, had to meet the demands of its shareholders whose prime concern was the profitability of the project. This meant for the mining company that it not only had to make a profit for the shareholders, but also had to demonstrate the capacity to make profits. Thus, given the almost 'fixed' goal of the mining company to make profits, the social rights of kin groups were further undermined when the state defined resource use within a citizenship framework with the company at the cost of kin groups. In other words, profitability to the company made sense in the context of a state that was concerned with national development, but it made little sense in a kin group context where the resource was seen as theirs, as their social rights were undermined by mere definitions. For kin groups, their social rights to ownership of resource entitled them

to at least a part of the value of the project, which included profit. Thus the issue of benefit-sharing between the state, kin groups and shareholders will remain an area of dispute as long as kin groups goals are not clearly defined and the other main players' goals are not adjusted accordingly.

Chapter 7

Interaction processes: the Gold Ridge project

7.1 Introduction

This chapter outlines the nature of interactions at the Gold Ridge Mining Project (GRMP), describing and analysing how each of the principal players interacted. There were at least three major instances of "articulation" of relationship of interest. The first instance was the preparation of the Gold Ridge kinship-based community to interact with the Ross Mining NL and the state. The second instance refers to the actual process of negotiation, which involved the state, Ross Mining NL, and the Gold Ridge landowners. The final instance refers to the agreements and disagreements that resulted from the interaction processes. Interaction among major stakeholders in the Gold Ridge Mining Project took a particular form.

During the 1960s, as outlined in Chapter 4 of this thesis, this type of interaction took the form of state and missionary facilitation of access for natural resource use. In the 1990s, in the case of the Gold Ridge project, the state went one step further by facilitating some form of kin group institution as a facilitating mechanism for interaction with kin groups. This was done by creating a landowners Association.

7.2 Organising gold ridge landowners

The need to reorganise the Gold Ridge landowners was partly due to the current state system in the Solomon Islands. In the Solomon Islands administrative framework, the three-tier system of central, provincial, and local government exists outside the jurisdictions of customary land and kinship systems. This means that while the state has its own administrative framework, this framework does not have direct management procedures over what happens to land and associated resources that remain within the customary system of influence. This situation has created problems of legitimacy and representation of kin groups when it comes to decision-making over resource use. In other words, this is a clear case of institutional divide between the state on one hand and the people on the other, who are largely kin group members.

This has been the concern of kin groups since political independence. The way the state approached the existing institutional divide between state and kin groups was to establish an ad hoc institution for landowners. This was the creation of the Gold Ridge Landowners' Association, which was used to facilitate the role of representation for landowners.

During June 1995, Ross Mining NL had already acquired rights to the Gold Ridge tenement and the associated mineral prospects from the previous license holder, Saracen Minerals Ltd. The acquisition cost no less than twenty million Solomon Island dollars (equivalent to at least six million Australian Dollars). The completion of this purchase allowed Ross Mining to begin the process of preliminary exploration to further confirm the deposits and to demarcate the extent of the mineral reserves. The new entry of Ross Mining caused problems with landowners' compensation claims for access into the prospect area. The problem that became apparent was that the compensation claimants were coming from many members of what appeared to be the same clans. This situation led to some confusion among the mining company management in determining who the mining company was dealing with. The base manager of the Gold Ridge project, Eugene Iliescu, wrote in June 1995 that,

We receive compensation claims every day from landowners, as water disturbance rights claims, edible fruit tree claims, land access, sacred sites disturbance rights, and noise claims. The company tries to pay some of the compensation, but in the next days or weeks another set of landowners returns with what appears to be the same claims. The company is not sure about legitimacy and whether we have paid the right landowners (Iliescu 1995).

The mining company's concern about the legitimacy of compensation claims was one of the motives for their consultation with the Solomon Islands government about an identification study on the Gold Ridge community. This took place in late June 1995. This was at a time when the Solomon Islands government changed leadership and was then led by the late Solomon Mamaloni for no more than six months, after taking over from the previous government of the National Coalition Party headed by Francis Hilly. Permanent secretaries were then changed over as well. I was the Secretary to the Ministry of Forestry in the previous government, and because of the strong anti-logging policy of the previous government Secretaries were removed. There were seven of us who were moved to the new subsidiary government portfolio. I was then

made the government consultant for National Heritage because of my earlier involvement in a World Heritage Project when I was the Secretary for the Ministry of Tourism six months earlier. It was at this time, in June 1995, that the government offered my services to work with Ross Mining NL in a social mapping study of the Gold Ridge project. The idea was to ensure landowner social structures were known and also to identify the existing clans and their leaders. This was intended to avoid different members of the same clan demanding compensation for claims that had already been paid for. This objective was supposed to be met through land adjudication, but it was seen as not sufficient to account for the organisational structure of the Matoba people. Therefore my role as consultant was for the identification of the Gold Ridge landowners (Naitoro 1995). This study contributed to the facilitation of the Gold Ridge Landowners' Association as the landowners' representing agency to the state and the mining company.

Clearly, at the beginning of the Gold Ridge project the issues of representation and legitimacy were the factors that strongly influenced the state and the company to facilitate the formation of the landowners' Association. It was an ad hoc approach, not only for the state and the company, but also for the community because the Association attracted temporary support only at the critical period of the project.

7.2.1 Land trustees

The formation of the Gold Ridge Landowners' Association was also seen as appropriate because the requirements of the Lands and Titles Act (NPSI 1981) established the need to appoint land trustees as necessary prerequisites for land registration. The state had been engaged in this land adjudication process for several years, and had already gathered scattered information about the Matoba people, especially in terms of categories of clans. However, the process of land adjudication had been on and off over the years as it was a difficult task to be completed quickly because of the issue of locating every landowner. There was also the aspect of land disputes arising from the declared benefits expected from the project area. Furthermore, there was the physical difficulty of the rugged mountainous terrain,

which made land adjudication a problem when government officials were given very few resources.

During 1995, the mining company's pledge to carry out mining meant land adjudication had to be completed in time for government registration. Between 1991 and 1995, there were 21 blocks of land identified for registration. The Lands and Titles Act required five trustees as representatives for each of the blocks identified. This legal requirement meant that each block of land required landowners to choose five representatives among themselves. This raised the representation issues again, because there was the fear that by using registration, and having five individuals listed as landowner representatives, others might come to be considered as lesser landowners. This fear was sometimes substantiated because when it involved a financial payout to landowners from those 21 blocks bank accounts were often made in the name of those five trustees. Apart from the landowners' own kinship system, the actions of these trustees in distributing benefits to landowners satisfactorily were left outside of the domain of the state and the mining company. It was not that the state and the mining company should be unnecessarily involved in distribution mechanisms of the landowners, but that ineffective or corrupt systems of distribution by some landowners created numerous reasons for further disputes and these were often taken to the government and the mining company.

It was during this period of land adjudication that I held several meetings and discussions with community groups at the villages of Valebeabea, Valeboli, Tinimeat, and Narakasia. During the six weeks' work in the field, a number of issues became clear. One of them was that the issue of trustee application for land registration was creating a hierarchy that was based on literacy rather than kinship rights. For example, 100% of the 21 blocks of land had appointed five trustees each and none of them had any female representatives. That is in a traditional society where moieties are headed by women. Not all of the men who were trustees were literate, but they were outspoken in their community. The other issue that became obvious was that there was tension created by this arrangement amongst trustee representatives themselves. This tension was shown through the number of leaders that were declared as chiefs over time. For example, in 1991, it was reported that there were only two leadership chiefs among the Matoba people, one representing the Manugaravu (big

bird) moiety and the other the Manukiki (small bird) moiety. This changed later to five principal chiefs. The five principal chiefs of Gold Ridge were Willie Rone, Allan Chris, Esi Sulunganga, Isaiah Otto, and Simon Tiva. These five chiefs remained principal chiefs as individuals but they could not represent the interests of their subordinate groups. Instead the subordinate groups were also given the right to represent themselves. Thus, a number of subordinate groups in each category of moiety had also appointed their own representatives.

The frequent changing and appearance of new individual leaders among the Matoba people, accompanied by numerous compensation claims to the mining companies, raised the issue of leadership and reorganisation of Gold Ridge landowners. The goal for the state and the mining company was to make sense of these different forms of leadership systems found among the landowners. It was decided that to begin to consider reorganisation of the landowners as preparation for the project negotiation, some understanding of their organisational system was necessary. It was found that because there were two main moieties (Manugaravu and Manukiki) there were two main genealogical chiefs. When each moiety was subdivided into sub-clans, there was a total of five sub-clans. Three of the sub-clans were from the Manukiki moiety and the other two were from the Manugaravu. This made up the five principal landowners or chiefs. The use of the term principal landowners was quite misleading. This is because they were not principal landowners per se, but were principal kinship leaders. When the state carried out land adjudication, this meant that each of 21 blocks identified was no longer listed as a moiety land area, but as a land area associated with the families that were currently using the area. The trustee requirement of the Lands and Titles Act had, in effect, legitimised the sub-clan land users as landowners, and therefore identified principal kinship leaders as individual leaders of their own right. The women in this system of moiety were entirely left out.

Making sense of this complex moiety system that changed unwittingly through the introduction of state policy on land adjudication only helped remove power from women and the traditional kinship leadership structure. It was in response to what seemed an "unfair" representation system, on one hand, and on the other, the need to formalise accountability for actions taken by landowners. As a result another

organisational system was then pursued and this was the Gold Ridge Landowners' Association.

7.2.2 Gold Ridge landowners' association

The formation of the Gold Ridge Landowners' Association was approached by trying to integrate some features of the existing kinship system with a standard association structure as used by NGOs. The idea was discussed with several local and expatriate lawyers of drafting a constitution for an association that would accommodate the system of Matoba social organisation. In discussion with Jennifer Corrin, a Honiara lawyer, it emerged that the current government laws did not provide for any such integration, but that it might still be possible. The other lawyers, representing landowner interests, including Francis Waleilia, considered that there was no need for any registration of the landowners' Association as long as they were happy to abide by a constitution for the administration of a landowners' Association. However, to meet the criteria of effective representation, including the involvement of women, it was thought that the structure of the landowner organisation should involve an 'Open Council'. The idea of an 'Open Council' was to allow maximum village participation. The Council would involve at least two people from each interest group in the community, including women, church leaders, and youth groups. In addition, as an open council, other people of the Gold Ridge area were also invited to participate. This Council was to meet at first to elect an Association board and to give the boards mandates to represent their interests.

The Association Board must, however, include the five principal landowners as permanent members. The other members would represent each of the eighteen sub-clans. The Association Board then was to elect their Chairperson, Vice-Chairperson, Secretary and a Treasurer. The Association Board was to represent the landowners' interests to the state and Ross Mining NL; the first meeting of the Council at Narakasia village mandated the new board and subsequently legitimised the role of the Gold Ridge Landowners' Association Board (GRLOAB).

After the formation of GRLOA, the board was ready to make deals. By February 1996, the landowners' Association formalised their office bearers. By this time, the

government had restored my posting not to the Ministry of Forestry, from which I was removed the previous year, but as Secretary to the Ministry of Mines and Minerals to implement the Gold Ridge Mining Project.

The first issue that was referred to the Ministry from the newly formed GRLOA was finance. The Association's first chairman, Charles Tani, informed the Ministry that financial resources constituted the main obstacle for the Association to run effectively. This issue was left out deliberately because the government and the mining company thought the new organisation would begin to make arrangements of its own to source finance, given that they would get royalty payments once the mining project was operational. The Association Board insisted that they had to be provided with finance before any negotiation could proceed. This issue was then taken to the government's advisory committee, recommending that financial arrangements be made to support the new organisation. While the Advisory Committee for the Gold Ridge project was supportive, the issue of where the money should come from became another problem. The issue was taken up with Ross Mining NL, which recognised the situation and decided that finance for the Association could be provided, as long as the Association was prepared to pay it back when their royalty was paid to them. As such, it was a form of loan arrangement. The company then made available the payment of more than SI\$ 90,000 in instalments to the Association. This financial resource was used by the Association to pay for its Board members' sitting allowances and the payment of their local lawyers. It also helped in getting advice from the PNG mining consultant, Mr. Sears.

Under these conditions, with the landowners' Organisation trying to establish itself, and at the same time trying to access financial and human resources, the Gold Ridge project negotiation process took place. This was the negotiation between the Gold Ridge landowners, the state, and the mining company. At the same time, the landowners themselves were expected to deal with their own internal politics. The internal politics among landowners was one of the reasons why the formation of an Association was strategically useful as a means of reducing claims made against the state and the mining company.

7.2.3 Local landowner politics

Landowners, as stakeholders, were considered as one category of beneficiary of the Gold Ridge Mining Project. The government itself had popularised the notion of landowners without knowing exactly what this meant in terms of organisation. Landowners had come to mean people and their land, with limited regard to the capacity of landowners as a social group that were part of the larger Solomon Islands community. Landowners were therefore left to determine methods and means with which they would respond to external forces, including the state and mining companies. The diversity of landowners meant that reaching decisions that would be considered as representative of the group was difficult. The formation of a landowners' association was one means to manage this situation because the project required decisions that would be binding over landowners and other stakeholders. However, while the formation of an association was a useful mediation strategy, it also provided an environment for dissent among potential association leaders. Thus, the Association was more adversary in nature, rather than reciprocal, as a means of establishing relationships as known in their moiety system.

The 'new opportunity' of disorganised landowners arose to the advantage of some of the landowner members. Prior to the Gold Ridge project, some of the members of the landowners were either working as public officers, politicians, teachers, or church pastors. These individuals had come to be important not only as landowners but now as a result of being exposed to the wider community. In the Gold Ridge case, one of the principal landowners had been a church pastor as well as a labourer in town. The fact that he had spent most of his time in town did not change his claimed leadership as a principal at Gold Ridge. Willy Rone was seen in this manner, because not only was he the landowner for Rausere land, where the main Gold Ridge deposit was found, but because he was also a church pastor in the South Seas Evangelical Church. Below the tailings dam, the Chuva Bible School was established before the mine, and he was working as pastor for the wider Guadalcanal community. Willy Rone became an important individual in the Gold Ridge project. There were teachers who were working as primary teachers in the area who became important as a result of the mine. Charles Tani was a case in hand. He was a teacher and became the first Chairman of

the Gold Ridge Landowners' Association. The second chairman, Peter Shannel, worked as an electronic engineer for the Ministry of Police, and was then a public officer. The Association Board member, Paul Tovua, had been the National Parliament House Speaker for many years and remained the Speaker of Parliament until his replacement at the end of 2001. The important point here is that individuals like those described above were significant leaders for landowners and most of them shared one thing in common. They were literate or partly so and had exposure to introduced organisations based on legal norms or on religious codes from existing religions. They were also exposed to other forms of organisational systems such as farmers' associations. So clearly, the new landowner leaders were those individuals with the most exposure to modern practices. Being exposed meant often that they were also part of the structures of the state. Thus the role of these new leaders was vital for understanding of the politics of the landowners. Although the new leaders were part of Gold Ridge society or the Matoba people, their own versions of what they saw as priorities for their people differed. The teachers emphasised the need for education and the pastors emphasised church-building. Similarly, public servants emphasised financial resources for service delivery, and the politicians stressed royalties and compensation. The men decided for the women that they needed a clinic and a gardening area. Clearly, the new Association took over the role of traditional leaders in dealing with the state and the mining company. However, this did not enhance community empowerment but further alienated kin groups because of the emphasis placed on the Landowners' Association. Nonetheless, the Association provided apparent legitimacy and nominal representation at least for the mining project.

From another perspective, the coming together of these new leaders under the Gold Ridge Landowners' Association was a great success in itself. It was realised that what held them together as a group during the negotiation period was the idea that collective demands were important for the negotiation of their rights. Their differences were suspended for the time being.

There were several areas of tension among the Matoba society that were transferred to the newly formed landowner organisation. These included the distinction between traditional moiety systems. They also involved distinctions made between those

blocks of land found to have the gold deposit and those blocks of land that were close by but were used for purposes other than actual extractive mining. One of the important areas of tension was the competition for power between the previous traditional moiety system and the new role of the Association. This becomes important because unlike the moiety system where society was divided into two in order to create reciprocal relationship, in the newly established relationship the gold finds were mainly in the land of the Manukiki moiety and not in that of the other moiety Manugaravu. The Manukiki moiety was not necessarily obligated to reciprocate with Manugaravu in this instance, and therefore the Manukiki reciprocity expectation was focussed on the state and the mining company. Willy Rone was, in this respect, an important Manukiki principal spokesperson. This issue was of particular importance because interpreting landownership outside of the traditional moiety system meant that Manukiki moiety did not have to share its resources with Manugaravu, although under the Matoba traditional moiety system both moieties would work out a reciprocal relationship. Instead, the Manukiki promised to share the resource with its other moiety, the Manugaravu. This meant they did not have to provide an equal share of the royalty payment. This was the basis for royalty distribution, although not all the members of Matoba society agreed.

The interpretation of resource rights outside of the Matoba moiety system also extended to the Manukiki moiety itself. This meant that land blocks where gold was found were defined as belonging to the sub-clan that had the access prior to the process of the exploration for minerals. In the traditional moiety system, there would be a greater share in the benefits from such land. In this instance, those who became trustees for the blocks of land found to have gold were to receive higher royalties than their cousins whose land nearby did not have gold deposits, although they were cleared for company building and infrastructure establishment. This meant that people like Willy Rone, who were successful claimants for the land where gold deposits were found, tended to take a larger share of royalties than others. These differences were important not only to the Gold Ridge community as a whole, but also in terms of implications for future disputes. These implications were down-played by the state and the mining company. The above distinctions between rights of landowners within a specific moiety, or between the moieties, formed a substantial basis for internal disputes during the project's life.

Apart from these clear distinctions within Matoba society, there were also less emphasised but equally important bases for dispute generation. One was the case of landowners whose land had been used for a tailings dam. The OboObo land community, whose land was used for tailings, had negotiated their separate deals through the hire of a private lawyer. They negotiated access to the mining company's power grid and to be given their share of relocation finance so that they could construct their own houses. This community's access to the mining power grid was seen as an advantage over those who were relocated without access to the power grid. The point of contention for them was the emphasis put on mineral resources land over the land value of the land used for tailings. Were these not simply two sides of the same coin? You could not have mining without a waste disposal area.

However, the benefit envisaged from the project held other differences at bay for the Gold Ridge landowners. The emphasis on the Gold Ridge Landowners' Association as the legitimate body to negotiate with the state and mining company meant that the company could only act on or react to claims made by the Association. The state also had the same attitude and therefore the Association was legitimised as such on behalf of the people. The Association became the only body that could represent the interests of the landowners.

7.3 Negotiation

The negotiation for the development of the Gold Ridge project was conducted during 1996 and 1997. The establishment of the Gold Ridge Landowners' Association meant that the state and the mining company were ready to cut out deals about the Gold Ridge project. The categories of benefit that were negotiated included: negotiating fiscal terms; negotiating the social and environmental impact; and negotiating power supply. Each of these categories of negotiating issues is outlined in this section.

7.3.1 Fiscal terms

The Solomon Islands government was supportive of the Gold Ridge project. The long history of exploration in the country without any actual mining development resulting had concerned the government over the years. The government policy then was to identify the Gold Ridge project as a priority project for the national interest.

The negotiation took just over a year to complete, between April 1996 and March 1997. This was seen as a very short period for negotiating a relatively large-scale project for Solomon Islands. The major issues for each party varied, and where controversy arose compromises were sought. For the state, the fiscal package was the major issue of negotiation. This included:

- Royalties
- Export Duty
- Income Tax
- Additional Profits Tax
- Withholding Taxes
- Custom Duty
- Goods Tax

In essence, the state was mainly concerned with financial revenues. These taxes and royalties were the major basis for negotiation between the government and the mining company, and any agreement over these terms would have constituted the Mining Agreement. For the landowners, on the other hand, apart from sharing the royalties, the indigenous landowners were largely considered as indirect beneficiaries from the project, that is, through payment of compensation for their inconvenience. The fact that the state was to give them royalties was then seen as a government favour to the indigenous community. This perception is clearly a sticking point for the indigenous community.

From the point of view of the state, a number of political and economic conditions were used as the basis for negotiating terms and rates of benefit from the Gold Ridge

project. The first is that of international competitiveness. The state was aware that the Solomon Islands was not a country with mining industry experience. There had been much exploration, but there had not yet been any mining development. Therefore, in competing for international capital, the state was in the first place not prepared to scare a potential investor away. The second factor concerned investor perception of the Solomon Islands. Thus, it was seen as essential that the state be seen to be promoting foreign investment. The idea was to have policies that were conducive to an investment environment. Such conditions should take into account the economic and political conditions expected of most investors. This meant that only so much could be asked of the project in terms of benefit demands. This point was controversial, as there was uncertainty about the value of the project, especially when the value of the project was unclear to landowners and reported exclusively by the mining company.

The next important factor influencing the state position in the negotiation was the history of the Gold Ridge project. The Gold Ridge mineral deposit had been known for a very long period of time. Throughout this time, there had been exploration. The Metapona River mouth, where Gold Ridge is located, was where the first Spanish explorers found alluvial gold leading to subsequent historical exploration in this area. In other words, the project should be made to happen or be closed off from any further unfruitful speculations.

During the period of negotiation in 1996, there had been numerous exchanges of information about mining in Papua New Guinea, some of which told of substantial benefits received by landowners. The principal project referred to in Papua New Guinea was Lihir. To avoid unachievable expectations, the state also recognised that Papua New Guinea had a mining industry, while acknowledging that this did not totally apply in the Solomon Islands situation. Also, in the case of PNG, the mineral resources found there were mostly world-class mines, unlike the case of the Gold Ridge project. Then it was decided that the state should adopt a strategy and policy of consultation and reasonable demands from the project. The Gold Ridge project was to be a test case project to pave the way for future projects in the Solomon Islands.

Given the factors outlined above, the state had largely tried to support the Gold Ridge project, even in cases where the state lost income. For example, in the Gold Ridge Agreement, the state decided to waive its right to royalties and awarded the 1.5 % on gross revenues to the indigenous community and the provincial government. The indigenous landowners received 1.2% while Guadalcanal Province received 0.3 % of the royalty. Under the existing mineral policy, royalties remained the property of the state. This change in awarding royalties to the indigenous community was largely a 'guild' action to meet the reality of Solomon Islands customary land tenure where land and all that is in it are considered customary property. However, for the state not to forego all revenue from the mineral, it placed an export duty of 1.5% on gross revenues to be paid to the state. These were basically the direct income benefit from the project. In addition the state imposed a fixed income tax rate of 35%, although a 100% cost adjustment was allowed for exploration and development costs to the mining company. There were also withholding taxes of 5% on interest payments. In terms of custom duty and goods tax, some essential items were exempted to facilitate the project. These revenue conditions were agreed upon. In the event of the company making an exceptionally high profit margin, which was calculated as above a 25% real threshold rate of return, a government tax on profit of 30% at a fixed rate, was imposed. This was called the Additional Profits Tax. The company agreed upon the Additional Profits Tax provision, although it was considered unlikely in practice to take place.

The government negotiation team was happy with any deal that would in the long term act as a policy incentive for project investment from foreign capital in the future. The government was also prepared to avoid unreasonable taxation of economic 'rent'. However, if the project became profitable beyond expectation then a 'ring fencing' policy was put in place through the Additional Profits Tax. These issues of taxes and royalty were the core factors under consideration between the state and Ross Mining NL. The tax rate regime mentioned above formed the government's fiscal package for the Gold Ridge project.

There were additional issues that involved Gold Ridge landowners. The indigenous landowners were largely considered in the light of compensation for their disturbance on the part of the state and the mining company. On the part of the state towards the

indigenous people, the carrot used was the awarding of the 1.5% royalty rights to landowners. The second important state contribution was the awarding of 500 ha of state land. This was to be used for a village for the Gold Ridge landowners who had been relocated. There were no payments of transfer fees to the state or actual payment of the property. This is another example of the state's general support and eagerness for the project to be implemented. Apart from those two factors, the state could only pledge support for the landowners in terms of general provision of services once the state began receiving more revenue as a result of the project.

7.3.2 Environmental Impacts

There were two approaches in the negotiation of the social and environmental issues surrounding the Gold Ridge project. The first approach was the statutory requirement for a feasibility study. The mining company was to produce a technical feasibility study that concentrated on the economic and technical viability of the mining project. The submission for such technical feasibility was conditional on the approval and issuance of the mining lease. It was also part of this mandatory requirement that the company was to produce an Environmental Management Plan. These issues were considered under the technical feasibility study. In submission of the feasibility study, the government was to determine the accuracy of the feasibility study and to ensure there were no significant errors that may have led to wastage of resources on the project. The government was aware that issues of mineral deposits and the extent of such reserves and the economic viability of the project were of significant interest to the company. This was especially the case as far as the investors were concerned. The knowledge of Ok Tedi and the Bougainville Crisis in neighbouring Papua New Guinea reminded the government of the seriousness of this aspect of the project.

It was the issues of the tailings dam and the use of cyanide for gold extraction that concerned the government most, as these had many implications for government policy. From a technical perspective, the tailings dam was the most important task to be carried out by the mining company. A feasibility study is a statutory requirement for securing a mining lease. Thus in April 1995, a feasibility study was commenced by Ross Mining NL. A full feasibility study in this sense requires a sufficiently large diamond drilling program, metallurgical test work, resource calculations and geo-statistical studies. It also involves extensive site engineering, investigation and

environmental studies. The Gold Ridge feasibility study commenced during April 1995 and data collection was completed in January 1996. The first submission of the feasibility study was made on October 11th 1996. The Solomon Islands government, in response, contracted Rio Tinto Zinc (RTZ) Consultants Limited of UK to review the Gold Ridge feasibility study. The feasibility study covered four main areas of technical concern:

- geology and mining
- processing
- engineering and infrastructure
- environmental issues.

Geology and mining concerns were important for the project as a whole. Geological consideration involves metallurgical test work, resource calculations, and geo-statistical studies. In the RTZ review they were satisfied that the original assay laboratory results were consistent with those from the external laboratory. They were also satisfied with resource estimation because the two methods used (indicator kriging and a manual polygonal estimate) were also comparable. In terms of mining concerns, only minor adjustments were identified, such as increasing the working hours of the truck fleet to allow for moisture content of the ore.

Apart from geology and mining concerns, the issue of the mining process itself needed to be ascertained. For example, in terms of processing, the RTZ review identified issues of further test work to identify the nature of clay-rich material to ascertain the size of equipment required. RTZ also concurred with the proposal to install an INCO cyanide destruction plant seven years before the mine closure.

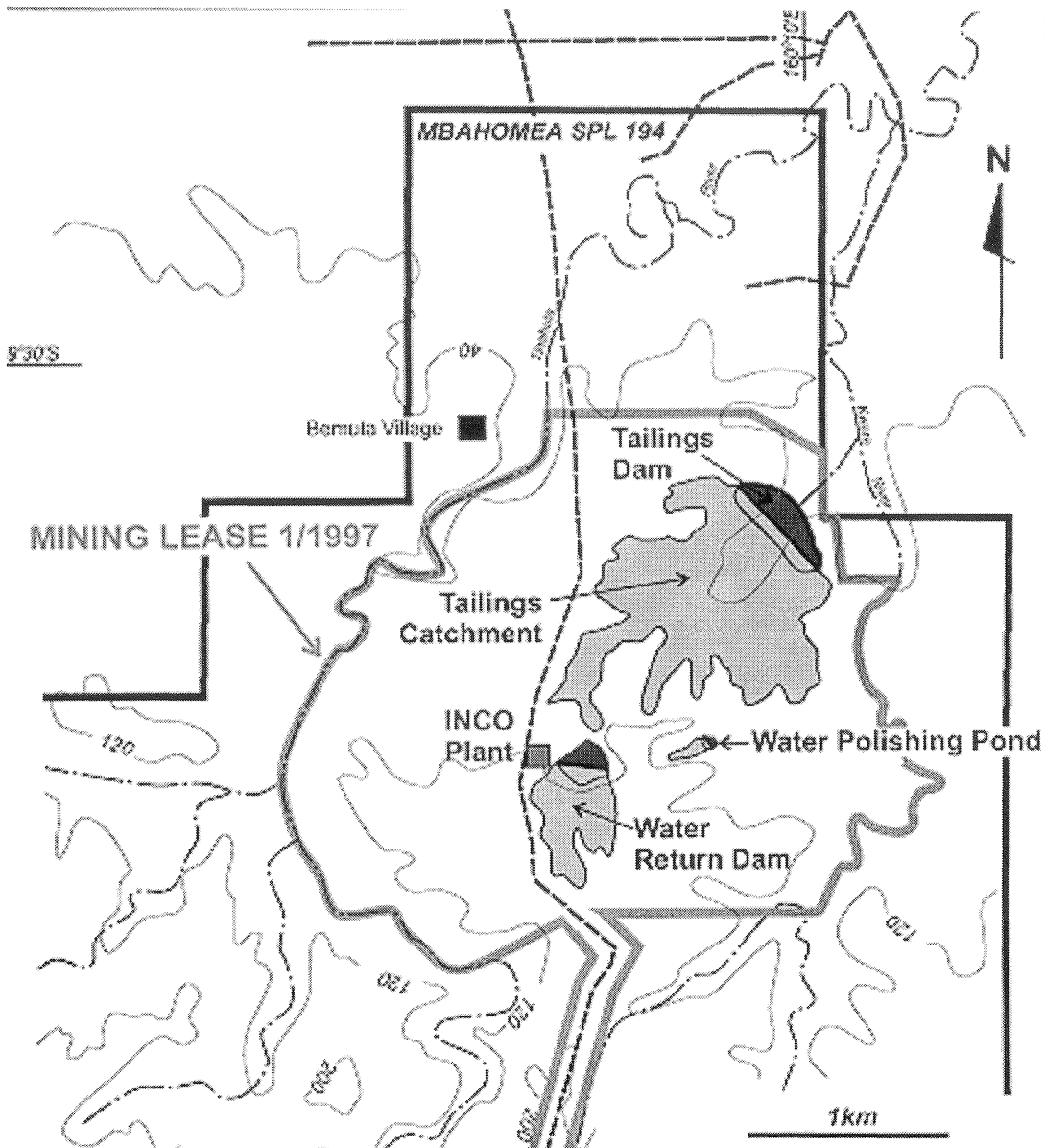


FIGURE 5 : Map of proposed tailings dam management plan with INCO plant
(Source: Ross Mining NL)

This was to ensure that cyanide discharge levels were less than 0.5mg/l WAD CN from the INCO plant. This cyanide concentration level from the INCO plant was expected to further dilute to 0.1 mg/l in the natural river system. The Solomon Islands government, through the Department of Environment and Conservation, was expected to verify and certify the acceptance of the diluting effect of the natural river system. A final consideration was the tailings catchment, which required geo-technical drilling to estimate permeability of the basal sediments, and water balance to assist in the technical design for the dam construction structures.

Engineering and infrastructure concerns were mainly concerned with haul roads, plant foundations, and tailings catchment areas. The concerns here were to do with stability, especially with the high rainfall conditions in the Solomon Islands. A further consideration was the pipeline connecting the tailings and the main processing plant. The design need was to identify the location of chokes, containment of sumps, release valves and inspection points. Part of the engineering work would also involve the establishment of an 11 megawatt generator power station.

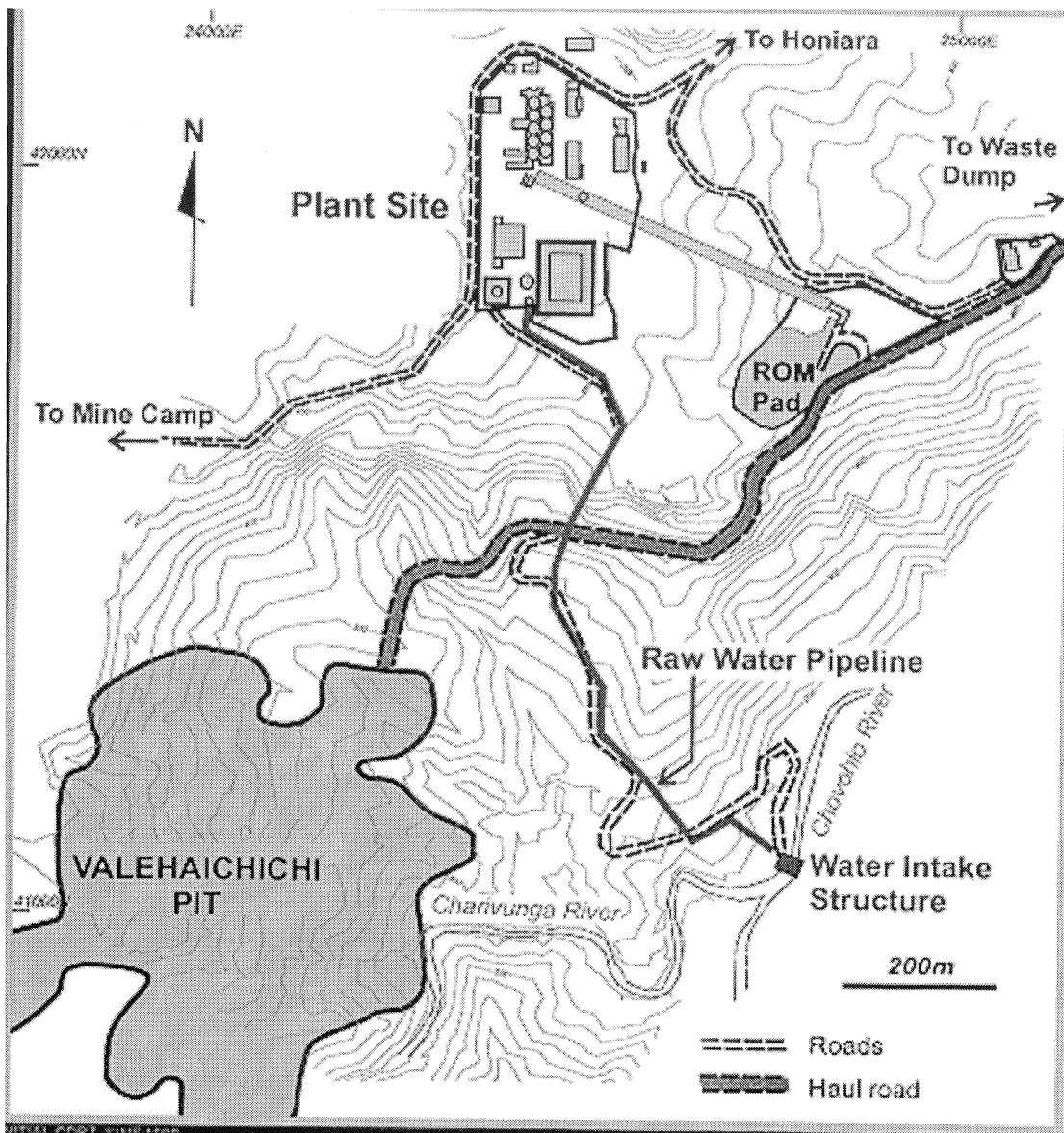


FIGURE 6: Map: One of the Gold Ridge pits and plans for roads, a haulage road, water infrastructure and the plant site (Source: Ross Mining NL)

These environmental issues were important not only for the mining company but also for the state to be able to convince the public of the high standard of environmental practice demanded for the project. These environmental issues had the characteristic of being too technical for most village people and much concerned about their trust in the state. On the other hand, more visible environmental concerns, such as the changing of the tropical rain forest into a 'moonscape', were seen as an important reflection of environmental impact on kin groups and their environment.

The company's approach to the issue of environmental management was to carry out a revegetation program, an evaluation of the suitability of waste rock as a plant growth medium, and an assessment of the containment of the tailings material. RTZ, however, suggested that an evaluation of the significance of contaminated waters from the tailings dam areas was necessary. There was also a need to provide proper engineering design to control both ground and surface waters for the ROM stockpile, processing plant, and mine workshop areas. There was the need for a detailed environmental management program (EMP) that would define the appropriate measurement, monitoring and reporting procedures. It was suggested that a complementary system of measurements (by Ross Mining) and monitoring (by SIG) be established. Thus, the major components of the environmental management program included:

- confirmation of water quality standards for all parameters to be tested
- procedures for land clearance works
- method statements to control erosion and soil conservation
- a plan showing how these procedures would be carried out in different areas where civil works were to be carried out
- procedures for handling and storing of chemicals and fuels, supervision of waste disposal in the waste rock dumps and tailings
- a scientific data collection program and an approach to be used in the event of animal poisoning in the tailings, and finally
- specification of measures to avoid excessive deforestation of the project and surrounding areas.

7.3.3 Social impacts

Apart from the technical aspects of the feasibility study, a social impact study was approached in two stages. The first stage was the land adjudication process involving the collection of vital information about landowners in association with a social impact study aimed at identification of the Gold Ridge social structure. I was involved in this component in carrying out the social structure identification (Naitoro 1995). The second stage in the approach to the social component was a 'wider community consultation process'. The Solomon Islands government at the time felt that, instead of simply hiring a consultant to report on the social impact, it was preferred that a comprehensive consultation approach be carried out. This involved the engagement of many indigenous customary landowners, cultural institutions, women's organisations and NGOs, such as the Solomon Islands Development Trust (SIDT). The Solomon Islands government established a social and environmental impact committee designed to facilitate this wider consultation process. The recommendation of this committee was to be taken up by the Gold Ridge Advisory Committee. The Committee had also been involved in the consultations with the mining company on issues involving the village relocation program. The committee's major concern was cultural loss and the capacity of the new village to accommodate the impact. Thus, with regards to village relocation, the cultural centre, women's centre, church building, and a primary school were seen as vital. Further on, the inclusion of a water supply system to reduce workload on the part of the women was also discussed.

The downside of this wider consultation approach was that, although there were many genuine issues and concerns identified, there was no way of ensuring that those conditions would be appropriately met and sustained through the life of the mining project and beyond. Thus it was sometimes argued that the social impact study was done in this form but with limited intensity, much like the physical investigations required of the main feasibility study. In a sense, the social impact study was not a critical factor for the mining project. But clearly this would be one of the important areas of lessons to be learned, that social impact assessment was necessary for sustaining the security of tenure. The emphasis on the physical aspect of the mining in

terms of financial commitment and time was seen as an indication of its relative importance.

One important outcome of this wider consultation process was the sense of ownership of the project. Thus, in addition to the technical and social aspects of the feasibility study there was also wider consultation with the various stakeholders. This was a necessary part of the requirements for issuance of the mining lease to Ross Mining NL. Hence the negotiation process, which also began simultaneously with the feasibility study, progressed in the light of the emerging information obtained through consultation and feasibility study verification.

7.3.4 Power supply

Apart from negotiating the environmental and social issues, a commercial dimension of the project became important as the project progressed. This was the issue of electrical power for the Gold Ridge project. At the start of the project in 1994, there had always been the assumption that the Solomon Islands government would supply electricity. The establishment of the Solomon Islands Electricity Authority (SIEA) as a statutory body responsible for electricity supply in the country sustained this assumption. However, it was also known, and a frequent occurrence in the country's main town Honiara, that power demand has always been an issue which the statutory body of SIEA had been unable to fulfil satisfactorily over the years. This problem went back several decades. Honiara township had grown significantly from 1953, when there were 1,100 people, to the 1990s, with about 50,000 residents. Subsequent governments had simply either loaned a new generator or subsidised it with smaller generator sets. Governments over the years had also tried to develop a hydropower station, but had been unsuccessful. The latest attempt on this idea of a hydro-dam project was the government mandate to Barclay Mowlem in 1995, to source finance and develop the project. The project could not get off the ground and was left to die naturally. Therefore the power situation in the country remained a critical issue.

It was under the above conditions in the Solomon Islands that the issue of power supply for the Gold Ridge project became critical. The government was obviously interested in supplying power to the Gold Ridge project, but this depended on the

capacity of its statutory body (SIEA) to be able to meet the demand. The fact that it had not been able to meet the existing demand for power in Honiara made the government worried about how far it could push to retain this right if the mining company decided to ask for the right to generate their power supply on the mine site.

This was the beginning of the power problem during 1996 and 1997. There were several meetings between the Ministry of Mines and Minerals, the Cabinet Office, and the SIEA management. The SIEA management remained of the opinion that they would be able to meet the deadline for power requirement of the mine. At first, the government's position was that perhaps it would be able to provide electricity power to the mine through SIEA, if the SIEA was able to meet the deadline for beginning operation. But, gradually time was beginning to run out for SIEA to meet such commitments. The mining company was also worried, and proceeded to push for the alternative of the company providing power supply for the mine. The early correspondence over the issue of power supply for Gold Ridge began. The mining company wrote to the Statutory Boards of SIEA that the mining company would seek exemption on the issue of power. This did not go down well with SIEA Management, who replied on the 6th of January 1997 that the Authority remained of the opinion that they would supply power reliably and with a competitive cost (Kwanairara 1997). At the SIEA Board's meeting on the 27th December 1997, the Board rejected the mining company's proposal for producing its own power for the mine. However, the mining company remained insistent on producing its own power, while SIEA also persisted that not only were they legally entitled to produce power but they were also capable to do so. This power issue had become a major issue and one that had to be negotiated so that a rational consensus could be reached. This became almost impossible, as the mining company wanted to control the cost of power supply and the SIEA wanted to expand its power supply market.

The mining company's insistence became known later, based on correspondence from the Distribution Engineer of SIEA, Mr. Martin Rasu. This was in response to earlier correspondence from the mining company for SIEA to participate in the contract for electrical reticulation for the mine. Mr. Rasu rejected the offer due to reasons of resource capacity:

..Although we are naturally interested in the electricity reticulation as per the details of your fax, we are sorry to inform you that due to workload commitments in Honiara, we would not be able to spare the manpower resources that would be required for such a project. Our advice to you, would be for you to seek the services of an organisation who has had wide experience in electricity distribution supply constructions, especially in rough terrain such as that likely to be encountered on the Gold Ridge project to undertake the sub-contact (Rasu 1996).

The above correspondence gave away SIEA's position about their capacity to be able to supply power for the mine in time. This position was already commonly known and had made the government wonder why the SIEA Board remained persistent that they would be able to supply power for the mine. What the government did not know at the time, especially during late 1996, was that SIEA had made contact with Denis Reinhardt as representative of a new syndicate called the Lungga Hydro-power Consortium. The Ministry of Mines and Minerals usually deals with the issue of power development, and there was no knowledge that there was development towards this line of thinking. Any consortium that was to enter into a power development contract with SIEA must have the concurrence of the parent Ministry. But instead, SIEA and the consortium had entered into a Memorandum of Understanding. This committed the SIEA to pay for sets of generators that were supposedly to ease Honiara's electricity needs and committed the project to deal with the Consortium through SIEA to supply power to Gold Ridge. This situation caused significant embarrassment to the Central Government by showing that the statutory body had become a commercial renegade. The Ministry responsible for SIEA was not aware that the government had not endorsed this new deal. Also, this development made the central government appear to have no control over its agencies, as evinced by the recent initialling of the Mining Agreement on 4 October 1996 (Sanga 1996). In relation to the issue of power, the government had agreed that in the condition that the government through SIEA was not able to provide power supply reliably and on time, the government would relinquish this right to the mining company. The government knew that unless the SIEA Management performed "magic", they would not be able to deal with the needs of the mine, especially where indemnity against under-performance was required.

The new development between SIEA and Reinhart's Consortium prompted the government to react instantly. An emergency meeting of the Gold Ridge Advisory Committee was held in which the Secretary to the Prime Minister, Jose Sanga, was the Chairman. Among those Committee members present were: the Attorney, Primo Afeau; Chairman of Public Service Commission, Waeta Ben; myself as Secretary to the Ministry of Mines; and the Chairman of the Gold Ridge Negotiating Committee and the Director of Mines, Don Tolia. The other ministerial secretaries were also represented at the meeting, including that of the Ministry of Commerce and Trade, Allan Arafoa and Deputy Secretary to the Ministry of Finance, George Kiriau. The Committee discussed the recent SIEA power development with unanimous concern for the government's reputation and the need for SIEA to comply with the initialled Agreement. Hence the Advisory Committee recommended to the Cabinet, that in the case of the SIEA Board behaving contrary to the recent government agreement, then the Board would be terminated immediately as a matter of national interest. But before that happened, the Ministry responsible for SIEA would give them another opportunity to take heed of the government position towards the Gold Ridge project and discontinue any rushed commercial arrangement that may cost the project or the country more than was necessary. In response to this demand from the Advisory Committee, the author as Secretary to Ministry of Mines and Minerals wrote a letter to the SIEA Board that they should consider granting the power exemption under the current circumstances (Naitoro 1996).

By this time Billy Gatu, the Chairman of SIEA, went to the local media, making allegations against me as Secretary of the Ministry of Mines stating that I had no regard for the interests of the nation. This media blow-out hit both local and international media in Australia (Syvret 1996). This power issue led the Prime Minister, Solomon Mamaloni, to make a press statement on the position of the government to avoid confusion (Mamaloni 1997). The SIEA Board was then subsequently terminated and was replaced with a new Board that was to ensure the statutory authority worked in concert with the government. Denis Reinhardt was declared an undesirable immigrant, as reported in the media (McCullough 1997). The government then issued the ministerial directive that Ross Mining would be exempted from the requirements of SIEA, as a result of the incapacity at the time to provide cheap and reliable power. The right for SIEA to supply power would remain,

depending on their successful completion of the Lungga hydro project, including meeting Honiara's demand for power.

While the government was aware of the opportunity to be able to supply power to the Gold Ridge project, the long years of filed planning on the part of the government, through SIEA, had made it impossible for the power supply contract to be clawed back by the government. Negotiating power had also demonstrated the diverse interests involved in the machinery of the state. Clearly the problem of not being able to meet power needs was due largely to lack of planning.

7.4 Agreements

An agreement is a form of contract that implies a degree of understanding between the parties involved. As outlined in the previous section, agreements are usually reached after negotiation. Apart from the power supply issue, in which the government gave away its right to supply power, most other agreements reached involved Gold Ridge landowners. There were three categories of issues involving agreements. The issues included benefits, costs of environmental impacts, and compensation for social dislocation.

The most important aspect of the Mining Agreement dealt with benefits from the project. That is the idea of how much each player should receive and whether such entitlements were agreeable to other players. For the state, a mineral resource is by law a state property. The state has exclusive rights over mineral resources. The Mines and Minerals Act 1990 clearly specified that mineral operations in the country could only be conducted under a government license. This would be the mining lease. Under this mining lease, the state may grant exclusive rights to any party for the purpose of mining development. The process of reaching agreement over mineral resources development in the Solomon Islands began with the Mining Law. Under the Mining Law, mining leases may be granted when its conditions were met. Some of these conditions were the need to fulfil the requirements of commercial viability, environmental considerations, and minimisation of social impact. These requirements would usually be met through a feasibility study, usually done by the mining

company. Thus, the mining lease and mining agreements were done simultaneously. That is, the negotiation of benefits from the mining project were conducted along with the negotiation of the feasibility study. These two documents were central to any mining project. While the document containing the agreement over the technical and environmental consideration of the project was executed through a letter of approval of the feasibility, benefits were negotiated and executed through a Mining Agreement. A Mining Agreement therefore gives the exclusive right of the state to the mining company by assuring that no one else will be given this right while there is an existing license or mining lease.

It was within the context of these state policy positions that agreements over benefits, environmental considerations, and social dislocation of Gold Ridge landowners were framed.

7.4.1 Benefits

The Gold Ridge Mining Agreement was reached on the understanding that the project must be a 'win-win' situation for all stakeholders. Therefore the economic and financial package had to be fair to all parties. Similarly, the law should also provide for an equal protection for all stakeholders. On the financial and economic side, the government agreed to a royalty formula of 1.5% gross revenue before tax, payable to land owners. The government also agreed with the mining company on taxation regimes that were considered fair. These regimes were covered earlier in the chapter. For the government, it had expected that the level of financial benefit through the various taxation regimes amounted to 45% of project total value. The government also agreed with the mining company that it be allowed a real rent refund of 20%. This means that the mining company could take 20% net profit return without attracting any further state tax. However, where there is an economic "rent" defined as super profit beyond the 20% real rent of refund, this would attract an additional fixed rate Profit Tax of 30%. The government was pleased with the financial aspect of the agreement. Given that the government wanted to create an attractive environment for mineral resource capital investment, it was prepared to make concessions in the context of government intake of 45% of the value of the project.

On the aspect of the law, provisions were made to allow for conditions that might force the mining company not to meet its obligations under the Agreement. The Mining Amendment Act Section 71(a) defined a Force Majeure situation that included allowances of time to compensate the company for forced to closure of its operation (NPSI 1996). The recent closure of the Gold Ridge Mine in June 2000 may have provoked the use of this clause. From the state and the mining company, their issues had been considered and agreed upon. The Gold Ridge landowners were the only other party that had to be taken into account. Under the Mines and Mineral Act, section 4(2) provides that no mining activity could take place without the written consent of villagers or landowners. This was defined as the Surface Access right of customary landowners. It was under this legal provision, that landowners had the right to negotiate with the government and the mining company for benefits as a result of them giving access for mining development.

Landowners were seen as victims of the project, and therefore their rights were expressed in terms of compensation and minimisation of social impacts. This was generally referred to as the cost for social dislocation of the landowners.

7.4.2 Social dislocation

There were two sets of agreement made with Gold Ridge landowners known as Memoranda of Understanding (MOU). These two MOU were made apart from the main Gold Ridge Mining Agreement, which covered issues and benefits described earlier. The MOUs were made on the one hand between the state and the landowners and on the other hand between the mining company (Ross Mining NL) and the Gold Ridge landowners.

The first MOU between the state and landowners was simple. The MOU between the state and the landowners contained government pledges. These included statements of principles of support for equitable benefits, provisions for primary school teachers and clinic services. These services were normal government responsibilities, though the state used them as bargaining items in negotiations. One reason for this was that the state could not afford any more beyond its current responsibility. The pledge was, however, to help when it could as a result of the income generation from the project. Yet from another point of view, the government commitment under the MOU was a

generous gesture, even if it was clearly unlikely to be met in the immediate future, given the resource constraints.

The second MOU between the mining company and the landowners involved two components, the compensation component and the minimisation of dislocation component. The compensation component involved direct financial payments and pledges for future financial support. The second component involved village relocation adequate enough to lessen the impact of the 'necessary' relocation impact. This involved compensation for sacred sites, payment for land leases and other minor costs (see Table 5 below)

1. The payment of SI \$3 Million dollars for disturbance and damages included: loss of income, Tambu sites, access and disturbances. These payments were in total, the payment for vacating of the area.
2. There was to be payment for 10 new High School Scholarships and 5 College Scholarships per academic year.
3. There was to be provision of 20% free carried equity, in cleaning, catering and security sub-contract which would be payable from the profits
4. The issue of 270,000 fully paid shares in the parent company, Ross Mining NL Limited
5. The payment of SI\$0.5 Million dollars premium for the tailings dam

TABLE 5: Summary of Compensation Package for the Gold Ridge Land landowners.

The five categories of compensation payment seen above constituted a major part of the package for the indigenous community of Gold Ridge.

The other component, which involved the minimisation of the impact of dislocation of the landowners, was carried out through the village relocation program. The relocation villages had an aggregate cost of SI\$ 6 Million dollars. The four main villages were built in a 10 ha land area, a portion of the 500 ha freehold land transferred by the government to the landowners. The relocation cost for building the

relocation villages was SI\$6 Million, or about A\$2 Million at the time. In consultation with the government and the indigenous landowners council, it was considered that the relocation village must be reasonable and built to be functional in terms of services to the residents. This meant the relocation villages must be located at close range to each other. There must be a primary school with a playing field, a nurse aid post, a cultural centre, a church and a women's centre. There would also be an administrative centre for the Gold Ridge Association, the newly formed indigenous organisation. Thus, apart from payment of 270,000 shares by the company that was given to the principal landowners, and the company's offer to pay scholarships, most other compensation payments were once only payment.

The speedy processing of the project was one factor that caused much confusion among the indigenous community. The fact that the company was able to bring all the machinery, build the relocation village, and pay for compensation at the same time gave the impression that the project must be worth more than the claim of the company of SI\$1billion. One thing that was clear during this time was the desire of the state and the mining company to make the project work. This may have been useful for the speedy processing of the project, but it did not allow much adjustment time for the indigenous community to determine the nature of their demands and interests. The fact that the state and the mining company were not only paying compensation but also supporting them to collaborate did not give independence to the indigenous community to be able to negotiate objectively with the state and mining company.

In the process of negotiation, and through the type of agreement reached, it became clear that the state and the mining company had their interests catered for. The state had the law in which mineral resources are defined as a state property, and the mining company possessed the capital and technical know-how about mining development. The indigenous community on the other hand was perceived as a victim of development and not as a true partner or contributor. Indigenous communities were seen simply as a stakeholder that must be compensated for the inconvenience of the project. They were not one of the development goals of the project. The indigenous community was also not institutionally prepared to represent their interests and definitions of development to the state and the mining company. For the above

reasons, the state was a competitor that could not represent effectively the indigenous communities' interests in resource development.

In the case of the Gold Ridge project, the relocation of the village involved the relocation of 1,200 indigenous community members. It was estimated that 10ha of the 500ha state land committed for relocation would be used. The remaining 490ha would be used as reserve land for the community. The choice of 500ha was given as a substitute for the 500ha of land issued under the mining lease to the mining company for the mining project. The mining lease was for a period of 36 years, upon which the indigenous landowners would reclaim their land. However, it was expected that such land would be returned to its original landowners. The relocation village was established east of Honiara, about three kilometres inland from Henderson International Airport. This was also considered an advantage for the villagers to have their villages close to town to allow access to the Honiara market.

The Gold Ridge Mining Project proposal was for an open pit gold mine and processing plant. The thirty villages or hamlets located on the proposed mine were to be relocated before any infrastructure development could take place. The thirty villages were largely the result of immigrant local population from the Weather Coast in the West and Suta area in the central parts of Guadalcanal Island, since prospecting started in the area in the 1950s. There were indigenous communities before the 1950s, but there were only a very few settlements. Most of the villages were developed as a result of panning culture, which came to be known as the Gold Ridge villages. The total population identified in the 1995 village census was 1,200 individuals. This included women and children, both indigenous landowners, and their extended families.

The identification of the eighteen genealogical groups in the social impact study of the Gold Ridge report that I carried out in 1995 advised that the design of the relocation villages should be more sensitive to the kinship divisions. In this sense the design allowed for five categories of kinship groupings, corresponding to the five principal landowners. The principal landowners were like principal maternal uncles for the significant social groups. The relocation design divided the relocation area into four distinct sections that were to accommodate four distinct village or hamlet areas.

The fifth principal landowner preferred to move further inland instead of joining others at the relocation village site.

The development of the relocation village area was therefore completed in sequence, starting with the first group of hamlets until the last one. Each hamlet area would hold at least thirty-six houses. The four villages in total made up at least 150 houses when completed. An underground water system was then developed to allow running water to the houses, which released the women from carrying water for cooking from the main river system.

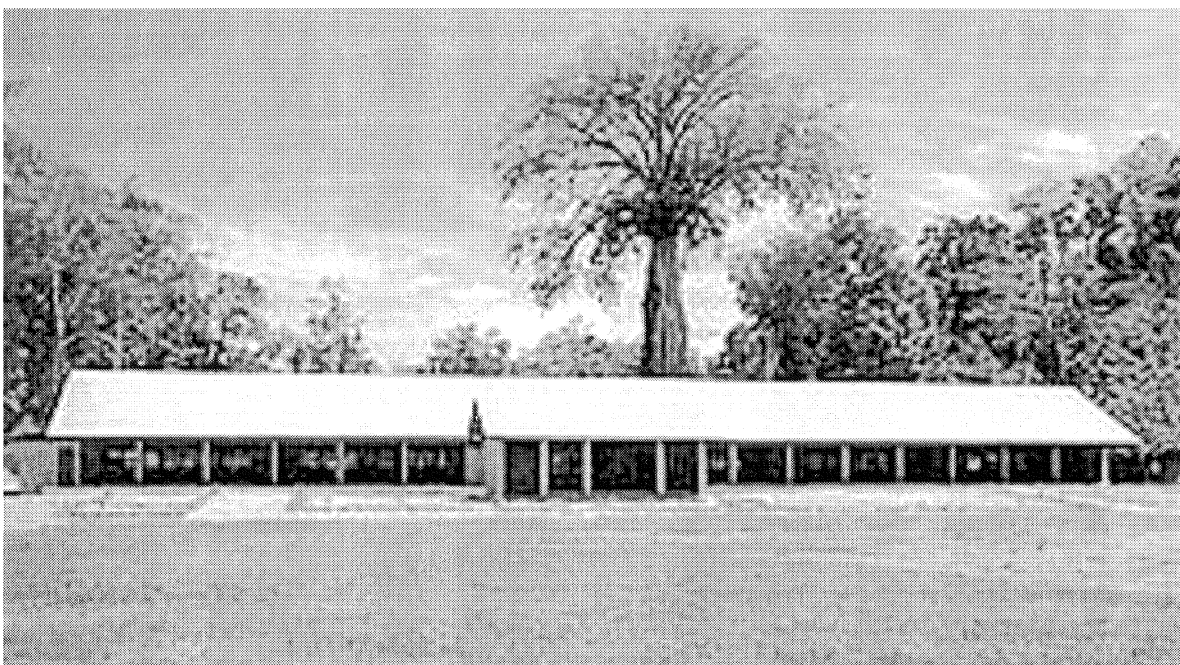


FIGURE 6: Picture showing the primary school building constructed for Gold Ridge community at the relocation village.

Water was seen as an important contribution to services to the village and the general well-being of the population. The villagers were also church-goers and although they were not from the same denomination, it was agreed that a church be built for them to become a general worship building. The South Sea Evangelical Church took over much of the use of the building because they held the majority of the members of the

indigenous community. There were also the women's centre, primary School building, clinic, cultural centre, and the Gold Ridge Association headquarters building.

The villagers were happy with their new homes until one of the principal landowners, Willy Roni, defected and joined Thuguvoda in their campaign against the Gold Ridge Mining Project. This defection was already discussed in Chapter 6 under section 6.5. His idea was that the compensation was not enough, housing standards were not adequate, and that they could have a better offer from another mining company. This might well have been so, but considering the position the state took in considering the project as marginal and one that should be used to attract foreign investment, the implementation was seen as quite satisfactory. In other words, Ross Mining performed to state expectations, given the political and economic scenario described earlier.

The problem as far as the relocation village was concerned was the issue of institutional function. The state expected the Gold Ridge Landowners' Association to take charge of their future through their organisation. An indication of this motive was the establishment of the Gold Ridge Association headquarters at the relocation village area. As an administrative centre for the indigenous community, the effective functioning of this organisation was seen as most significant. The Gold Ridge Association organisation did function during the negotiation and for the purpose of the relocation village, but later the organisation seemed to have become reduced to a few decision-makers and therefore as an indigenous leadership it failed to meet its role. This institutional failure was decisive in the way the indigenous groups would deal with the state and the mining company.

7.5 Disagreements

There were significant areas of disagreement during the course of the development of the Gold Ridge Mining Project. These sets of disagreements did not include disagreements over the course of negotiation, where later some compromise was reached, but involved disagreements over which there was no easy solution. Among these major areas of disagreement, there were four main areas that stood out during

the project. They involved: ratification, compensation, monitoring, and supply of power.

7.5.1 Ratification

The idea of ratification of the Gold Ridge Mining Project was strongly supported by Ross Mining NL, initially, but the negotiation committee rejected the proposal. The mining company felt that if a Ratification Act was provided, it would allow the project to operate independently of other laws in the country. This sounded similar to the approach in the early arrangements for the Panguna mine in Bougainville. The government rejected the proposal because it tended to operate in isolation to the country's economic development activities, especially other governing laws that administer taxation regimes for revenue rising in the country. The mining company subsequently dropped this proposal.

7.5.2 Compensation

Compensation became an issue for Gold Ridge landowners. Although compensation for sacred sites and other payments, as described earlier, was seen by the company as sufficient, the landowners were not very clear about the extent to which such compensation was appropriate. The company paid SI\$ 3,580,710 as compensation, which included the premium for the tailings dam area known as Lots 6, 7, 8 and 9. The above value was considered to be compensation for all matters involving:

- land premium payment
- destruction of tambu sites
- loss of access to tambu sites
- loss of income
- loss of access and rights to the area
- social inconvenience
- physical disturbance, and
- destruction and loss of burial sites

The landowners had problems with this aggregate valuation of the above social and cultural cost. The question was, how do you value land in the context of a mineral find? For the state, the landowners were simply giving access. For the landowners, the mining development did not necessarily mean access, but rather destruction of their land, social and cultural environment. For the landowners, the state and the mining company misconstrued this notion of "access right", which they considered rather as a "destruction right". This meant the value of destroying their social, cultural, and physical environment. The Matoba society would not be the same again and there was no guarantee that the changes brought by the mining company would lead to improvement of social lives in the long term. It was one of the reasons why landowners were talking about SI\$400 Million compensation in the first place. Therefore, although the landowners were temporarily pacified through persuasions of future development, it remained an unfinished business. Clearly, the issue of value remains an important area for future research.

7.5.3 Monitoring

Monitoring of the project was the third area of uncertainty in the Gold Ridge project. The government acknowledged that for the Gold Ridge Mining Agreement to live up to its expectation, compliance with the agreement had to be monitored. There was need for the establishment of control mechanisms to ensure that the mining project complied with the agreement. On the part of the government, apart from improvement of human and technological resources at the Tax Department, there was also the pressing need to put a tax compliance regime in place. In addition, there was the need for the inspection of the Gold Ridge project by the government. This was not taken easily, as the mining company was concerned with confidentiality. On the part of the government there was the need to inspect the project to ensure that government requirements were met. This included inspection of mine work to ensure it complied with the proposed best practice suggested in the feasibility study. These issues were not satisfactorily resolved, although it was assumed that government would carry them out as provided for under government statutes. The above areas of disagreement or uncertainty were the major areas in Gold Ridge that had not seemed to be transparent. The issue of power supply was seen as settled under the condition the government saw as unavoidable.

7.6 Conclusion

The central focus of Chapter 7 has been on the nature of interaction. Interaction with kin groups was a significant obstacle because kin groups are not recognised as an organised unit. Kin groups were seen simply as people that did not have any legitimate and legally recognised systems of organisation, although they were at the same time legally recognised as customary landowners. This institutional gap was one of the reasons for forming an ad hoc organisation for landowners such as the Gold Ridge Landowners' Association. It was only following the establishment of this ad hoc organisation that interaction with kin groups for land access was seen as possible and legitimate.

The problem with the use of ad hoc institutions for interaction with kin groups is that a large number of kin group members had been further removed from direct contact with the state and the company. The new Association executives acted as mediators between their people and the state or the company. The new executives of the Association were a new community elite because of their exposure to the world outside of their immediate kin groups. The elites were either former school teachers, church pastors, or even government officials. In other words, while an Association is a useful mechanism to facilitate project development for the mining company and the state, it is not a panacea for securing kin group rights in mineral resource development.

The instrumental position of the state allows the state to enforce measures that would support development of a mining project and thus the company and state are structurally better placed to achieve their goals in a mining development project. The legal position of ownership of mineral resources by the state and the capital and technological monopoly possessed by the company made both players better placed to argue for their rights. This could not be said for the landowners in their current position, where mineral resources are appropriated from kin groups, undermining their bargaining position. Thus interaction becomes fairer where positions of influence are of relative equivalence. In other words, the landowners' position could be improved if mineral rights ownership was returned to kin groups and thus gave them a position to influence mineral resource development contracts. This will help

kin groups with a stronger position to take ownership of resource development, while the state has the right to make laws and the mining company has access to capital and technology.

At present, kin groups are dependent on the charity of the state and the mining company. Therefore, the interaction process is strategically biased against kin groups. Thus issues of social, cultural and environmental concern are sometimes marginalised because they are largely dealt with directly between the state and the company. Direct involvement in the management of these issues by landowners is essential if an improvement in the position of kin groups in mines is to be expected.

Chapter 8

Kin group articulation in mining projects

8.1 Introduction

The purpose of this thesis has been to examine the nature of natural resource development relations between kin groups, the state and development companies in Solomon Islands. The focus was on the forms and practices of relationships that affected kin groups in mineral resource development. In other words, the focus was on the structure of relationships that determine mineral resource development for kin groups. Therefore, in trying to understand the structure of relations, the concept of articulation was used to understand the position of kin groups in natural resource development. The Gold Ridge Mining Project in the Solomon Islands was selected as the main study case for this research on articulation between kin groups and the mining project.

The central argument of this thesis is that the articulation of kin groups in natural resource development has been instrumentally biased against kin groups. This instrumentally biased form of articulation of relationships has its roots in the history of contact with colonial powers and has persisted until the present. Therefore, while the relationship between kin groups and natural resource development has improved over the years, such improvements were characteristic of processes rather than the structures that govern those processes. Improvement of kin group relations with natural resource development will require shifting beyond processes to structural changes that accommodate kin groups' collective goals. It has not been learned to this day that Melanesian customary land tenure will not accept, although tolerate, the idea of state ownership of natural resources.

The grounds for this argument derive from three areas of investigations into the nature of relationships. The first area is that of the historical context of contact in Papua New Guinea (PNG) and the Solomon Islands. The next area is that of the relationship during the early plantation economy in both countries, and finally that of the recent

mining development projects selected for this study. The Gold Ridge Mining Project is an important case for understanding the nature of the relationship between kin groups and mining projects, which may provide lessons for other mineral resource projects in the Solomon Islands and generally in Melanesia.

The study was guided by the research questions outlined in Chapter 1, which aimed at understanding the problem of kin group articulation in the Gold Ridge Mining Project. This problem of kin group articulation in natural resource development was approached by an analysis at two levels. The first used secondary documents to ascertain historical forms and practices of articulation in the periods of the plantation economy in PNG and Solomon Islands. The second level described and analysed specific natural resource development projects to identify the forms and practices of articulation at a more specific level. The cases of mineral resource development considered were four mining projects in PNG and the Gold Ridge Mine in Solomon Islands. These two levels of analysis of the problem of kin group articulation in natural resource development are outlined in Chapters 3 to 7 of the thesis.

In trying to understand the nature of the relationship between kin groups and natural resource development, an anthropological concept of articulation was used as the theoretical framework for analysing the structure of relations. The concept of articulation is rooted in the philosophical works of Vico and Saussure and applied in contemporary structural anthropology by Sahlins. The use of the concept of articulation was useful for this study because the issue of natural resource development is not only about economics but also about social change among kin groups. Kin groups have been subjected to social transformation since contact with the outside world. Social groups have been struggling to re-establish their role in the modern world with much difficulty. One way to understand this difficulty is in examining structures that dominate and persist in society. Thus the literature on articulation and its dimensions were helpful as guides in identifying the forms of articulations and practices that influenced relations in natural resource development, both in PNG and Solomon Islands. The review of four major mining cases in PNG helped to establish the forms and practices of articulation that influenced mineral resource development in that country until the present. The subsequent review of natural resource development in Solomon Islands also sought to show the forms and

practices of articulation of relations with kin groups in Solomon Islands before the development of the Gold Ridge project.

Before outlining the major conclusions of this study, it is worth noting that there have been some limitations to the conduct of the study itself. The first important limitation that needs to be considered has to do with the recent 'ethnic conflict' in Solomon Islands. This conflict, which has involved the forceful removal of immigrant populations from neighbouring Malaita Island, has lasted for almost three years. This made my return to the Gold Ridge Mining Project impossible. Apart from the Gold Ridge Mine being in an active area of conflict, the fact that I am a Malaitan researcher has made the environment personally unsafe. The result of this situation is that information used about the Gold Ridge project was limited to an earlier visit in 1998 and the analysis of experiences from my previous three years' involvement in the development of the project between 1995 to 1997. This factor also accounts for the importance of the further desk review case studies of PNG experiences for this thesis.

8.2 Background and research findings

This research was aimed at understanding the structure of relations inherent in natural resource development between kin groups and natural resource development projects with particular emphasis on mineral resources. Since the study focus was on the structure of relations, literature that was relevant for understanding the structure of relations was consulted. Relevant structuralist literature involved the concept of articulation which was useful in ascertaining dimensions of social relations. Vico and Saussure's work accounts for the origin and the definitions of the dimensions of articulation, and Sahlins' work defines the application of the concept of articulation in social change and continuity. What emerges from this literature is that understanding the structure of relations requires understanding of social systems. But there can not be a social system without social actors, and therefore the structure of relations is about social actors and how such social actors could create meaningful relations. But, at the same time, what is meaningful to one actor may not be so meaningful to another. This is particularly relevant in situations of cultural contact, as in the case of Solomon Islands. But as the literature on articulation suggests, in the context of cultural contact social actors behave in the ways they know, and this may result in

situations of conflict and thus create social fractures when one set of actors assumes a position of dominance. Thus the dominated actors' social systems undergo social transformation. The subsequent social relations that are established after cultural contact may serve the interests of the dominant actor, resulting in a perpetuation of a form of articulation that is instrumentally biased against the other actor.

In using the above framework, this thesis argues that the structure of relations between kin groups and natural resource development has been instrumentally biased. In other words, kin groups have been instrumentally articulated since contact, and this has persisted until the present day in Solomon Islands. Therefore, despite some improvements in the process of establishing relationships over natural resource use, the bias exists in the structures that govern the relationships between kin groups and projects.

In presenting the findings of this research, the thesis is organised into four categories of findings. The first category is that of the historical origins of the present day instrumental articulation of kin groups in natural resources. This was mostly created during the plantation economy period in PNG and the Solomon Islands. The second category of findings is in the earlier natural project development in Solomon Islands, in other words, these are findings about the nature of articulation over natural resource use prior to the Gold Ridge project. The third category of findings is in the review of mineral resource development of PNG experiences. The review of four mining project cases in PNG provided some indications of this form of instrumental relationships between kin groups and mines. The fourth category of findings is in the case of the Gold Ridge Mining Project in Solomon Islands. These findings are presented to demonstrate that despite kin group improvement of relations over natural resources over the years, the structures that influence such relations remain instrumentally biased against kin groups. Each of these categories of research findings is presented as follows.

8.2.1 Origin of form and practices

This thesis has followed the above argument by tracing the nature of historical contact both in PNG and Solomon Islands by trying to ascertain the forms and the practices of relationships with kin groups that were most dominant at the time. Since the colonisation of Melanesia occurred at about the same time in the nineteenth century, kin groups in both Melanesian states were subjected to similar political and economic forces. The tracing of the forms and practice of relationships during the contact period and subsequent years in terms of natural resource use formed the basis of evidence found for this work.

In the context of PNG and Solomon Islands, the imposing subject was the state. In both PNG and Solomon Islands, the early nineteenth century saw the beginning of this practice of articulation through the trade of material goods that had not previously been available to these kin groups. The colonies that followed used legal structures to lay the foundations of instrumental articulation. The process of declaration of areas as sovereign territory of a colonial power resembled the colonial power's value system. In the case of PNG and Solomon Islands, the imposition of the state was in conjunction with the imposition of doctrines of tenure. In the context of the British colony, the roots of the doctrine of tenure imposed owed their history to a feudal system (Sackville & Neave 1988:148), which could be traced to William the Conqueror, who confiscated the property of English landowners and redistributed them to his Norman supporters and some English men for their loyalty. In the case of William, he retained the interests in land that sustained ties between the king and the tenants (Sackville & Neave 1988:149). While there have been modifications to this doctrine of tenure, the imposed state interest in land as crown land has remained. In Solomon Islands, this doctrine of tenure was reflected in the early land reforms enforced in the early twentieth century. Under these land reforms, the doctrine of estate was introduced. Estates are classified in two categories. The first is that of estates as freehold; and the second as less than freehold (Sackville & Neave 1988: 169). The practice of leasehold interests in land comes under the category of less than freehold (Sackville & Neave 1988:169). That is the idea that estates were to be given a specific period of time. Thus, much of the land alienated in the Solomon Islands was given on leasehold interests for a period of 999 years. In the Solomon Islands, both

forms of estates were used, although leasehold was more common. Most of these leaseholds or freeholds were given to planters for the coconut plantation economy in Solomon Islands prior to the Second World War.

In the early period of land reform, it was mostly coastal land in Solomon Islands that was alienated. This period of land reform, commencing in 1901 and practised in subsequent decades, established the basis for a relationship over natural resources, but also the basis for disputes. This land reform policy circumvented landowners' rights as the result of the use of the idea of 'waste' land policy (Lasaga 1972, Allan, 1957). From the point of view of the state, this policy was to facilitate plantation economy, which dominated this part of Solomon Islands' history. Thus major plantation companies like Levers Pacific Plantation Ltd controlled a large proportion of alienated land (Lasaga 1972). While the Second World War temporarily suspended much of the plantation activity from 1940-48, most of the fertile land had already been appropriated for plantation activities. Guadalcanal Island was one of those heavily affected by this policy (Lasaga 1972:29). This issue of land was a dominant factor in terms of the relationship between landowners and the state even after the Second World War. After the war, the relationship between the state and the landowners remained tense. This is reflected in the post-war attempts to carry out natural resource development projects. This is particularly the case in observing the nature of the relationship in the context of both forestry and mining development.

The result of the effects of land reform on kin groups left a sense of distrust of the state and foreign companies. The social movements that developed after the Second World War, such as the Maasina Ruru movement in Malaita and the subsequent Moro movement on Guadalcanal, were indications of kin groups' distrust and attempts at resistance to what they saw as forms of subordination. The account by Davenport of the Moro movement, discussed earlier in the thesis, indicated that the sentiment of kin groups centred on their displacement, especially in terms of land policy and leadership control of their community.

8.2.2 Articulation of kin groups in the Solomon Islands

Apart from situating the roots of marginalisation of kin groups in historical context, there were subsequent national development activities in Solomon Islands that also illustrated the instrumental forms of articulation of kin groups. In Solomon Islands, it was the process of establishing the state and the introduction of doctrines of tenure that were significant factors influencing the structure of relations with kin groups over natural resources.

The importance of the nature of relationships with kin groups in natural resource use is manifested in the application of the practice of estates during the post-Second World War period for forestry resource development in Solomon Islands. This process is described in Chapter 4 of the thesis. The state began the idea of establishing state forest estates throughout the Solomon Islands in 1962. Much of the forest estates acquired since 1962 were administered in a form that forced kin groups to consent under conditions of duress. The duress was the potential threat of the state using compulsory acquisition, and not paying any compensation at all. In forestry, the government's notion of developing 'forest estates' was seen as necessary for the long term sustainable development of the resource (Trenaman 1962: 7). The first forest government estate to be established under this acquisition process, was that of converting Vangunu Island into a forest estate. The state's dealing with landowners was to declare an area of forest as a 'state interest' and then inform landowners that they must give their consent in retrospect. As in the case of the Vangunu forest estate, there was resistance, but it was futile because the state had the ultimate right to acquire it compulsorily. This form of relationship was likened to a situation of 'duress' and therefore landowner discontent was often kept to themselves. For kin groups, this post-war attitude of the state to kin groups resembles attitudes about land reform during the pre-war period where the state appropriated land for plantation economy.

The state's long term goal for the sustainable economic development of forestry was suggested in 1944. The idea was to harvest and not 'mine' the forest. This policy approach led to the establishment of the Forestry Department in 1957 (Trenaman

1962). The process of securing forest estates was the basis for expressing the nature of the relationship between the state and landowners during this period in terms of forestry resources. But since the state had the attitude that it had the right to control and own natural resources, its approach to landowners was coloured by this attitude. At this time the state was also in the process of reviewing land laws, and its intention was that while customary needs were to be accommodated, the state's policy on land in Solomon Islands was one of individualisation.

It was under these conditions that the relationship between the state and the landowners was established. The government acquisition of land for forestry use was based on compulsory acquisition, where landowners were asked to give their consent for the area defined since the government had the ultimate right to acquire it with or without their consent. Given landowner consent under such a situation of 'duress', landowners were to be given 10% royalties, and compensation for any improved land was 6d per acre. The landowners disputed such arrangements, as in the case of Vangunu by a landowner spokesperson known as Kinio. It appeared that even then, the landowners were not so sure of the arrangement, because they were suspicious that they were not getting the proportionate economic value of their forest resource.

Clearly, in this forest example, the relationship between landowners and the state was instrumental in favour of the state. While the state may argue for national interests, the landowner argument for their right to receive appropriate and proportionate benefit from their natural resources was already a major concern for them at this time. In other words, the state had used its position of power to influence natural resource use where landowners' conscious and fair demands were subordinated. This indicates a subordinate position for kin groups when decisions for forestry use were negotiated at the time. Kin groups were reluctant participants in government impositions, because of their perception that relationships over these decisions were not reciprocal. However, forestry use was sustained by the state until the years just prior to independence in 1978.

It was the expectation of political independence that led to the change in attitude that perhaps people's interests should be better represented than had been the case in forestry development. Thus, when it came for the development of fisheries, the idea

was to implement a joint venture approach to the project. A joint venture with the people would take the form of the state representing the people and the investing company representing itself. The joint-venture idea was seen as an improvement since the new state would be ruled by Solomon Islanders, who while representing the state continued to associate themselves as landowners as well. Thus the joint-venture was between the Solomon Islands government and the Japanese company (Maruha Ltd of Japan). Under this arrangement Maruha had an ownership of 49% share in the joint-venture company (Solomon Taiyo Ltd) while the Solomon Islands government through its investment arm (Investment Corporation of Solomon Islands (ICSI) held 51% on behalf of the government). The project was to employ Solomon Islanders with Okinawan fishermen. The joint-venture project had for almost twelve years made no profits for the state. It was becoming a common perception in government circles that it was amazing that a company can operate with losses for a decade and remain operating as a normal business. The government was taking revenue from taxes but not from its shareholding in the company. One important factor in this new form of relationship under the joint-venture was that like the landowners, the state too was not getting profits from the project. This situation contradicted one of the expectations of Solomon Islands leaders that joint-venture projects were a better form of relationship to previous arrangements in forestry. The common knowledge that the state was not making any money for the people through joint-ventures was an important factor influencing kin groups to consider other alternative forms of forming relations for natural resource use. This opportunity came when an agricultural plantation was planned for the Guadalcanal plains.

The issue of the share ratio in this project between the state, company, and the landowners had been a point of contention with landowners for almost the whole period until project closure in June 2000. What this project experience suggests is that landowners' goals had not been met even when a previously successful project as SIPL was functional.

The experiences of land alienation since the early twentieth century, and subsequent estate developments in the post-war period, have created a sense of distrust and suspicion between kin groups and the state. The fact that there are no examples in Solomon Islands that might illustrate the extensive use of natural resources spanning

several decades, or even centuries, made the question of relationship over natural resource use a fundamental issue in Solomon Islands.

8.2.3 Articulation of kin groups in PNG

The study's review of PNG's experience in mineral resource development relations showed gradual changes in terms of the position of kin groups in mineral resource development. There were indications that kin groups' positions in mineral resource development relations had gradually improved in terms of process. In other words, there were gradual shifts in the balance of benefit flows towards kin groups. For instance, in terms of attitude towards kin groups, the kind of actions taken and the forms of interactions practised showed kin group engagement in natural resource development. However, while such improvement was due largely to landowners' persistence in demanding recognition of kin group rights, the study also showed that the structures that influence these improved processes were sustained in each of the projects examined.

In PNG's experience, the first form of relationship over natural resources identified between kin-groups and the mine project was described by Burton as a 'discovery paradigm'. This was the first form of relationship identified in PNG resource development relations with kin groups. The major feature of this form was reflected in the attitude of miners towards kin group societies. As shown in the case of the Ok Tedi mine, miners treat kin group society as 'isolated', 'uninhabitable', and often referred to it as a 'discovered' area. This was the 'discovery paradigm' dominant in early relationships with kin groups in PNG. This attitude turned a 'blind eye' to the people and society existing in that environment, which had resulted in establishing an instrumental form of articulation between the miners and the existing local society. This was a structure in which the existing Ok Tedi society was valued as lower in status in relation to the miners and the institutions that such miners represent. It created a sense of legitimate dependency of kin group society on miners. This 'discovery paradigm' was also characterised through the attitude towards land and the resources within it. This was particularly the case where land was considered a state property under the notion of terra nullus. This was the idea that since this land was not

used by the natives, it automatically became state property. It was this 'discovery' form of relationship that cultivated the basis for the new structure of relationship with natives over natural resource use. The introduction of legal instruments to define mineral or other natural resources as state property was in effect a clear demonstration of this 'discovery' form of relationship.

Clearly the 'discovery paradigm' is a form of instrumental articulation because it legitimised kin group dependence on miners and the state, rather than seeing them as equals in the development of natural resources. The state, through its agents, instituted this new form of relationship over natural resources in PNG and justified it on the basis of 'discovery'. Following the Second World War, this attitude of 'discovery' began to change with the introduction of the idea of decolonisation or self-determination within colonies. Thus the 'discovery' form of relationship was modified or expressed rather differently in the form of 'ratification'. The attitude that kin group society and the resources within it were 'discovered' laid the bases of the attitude towards kin groups and therefore sustained this form of relationship over time.

In PNG, this study showed that the Panguna and Ok Tedi Mining cases demonstrated the 'ratification' form of relationship over natural resource use. The study showed that ratification is also a form of instrumental articulation. The Panguna Mining project adopted this model as the basis for the development of that project. The major feature of 'ratification' was the use of legal instruments to 'isolate' the project outside of the environment in which the project was located. This legal isolation was important because, like the 'discovery' paradigm before it, the project was seen as necessary for the state rather than the indigenous people directly affected. Ratification was also important in another way, in that it acted as a legal 'fence' against other legal changes that may have arisen as a result of the emerging independent state of PNG. Both the Ok Tedi and the Panguna cases were mines developed on the basis of ratification. Ratification as a form of relationship was different to the former 'discovery paradigm' model in that the notion of 'self-determination' that was promoted worldwide was in direct contradiction to any form of complete 'isolation' of indigenous landowners from the project. Ratification was therefore marginalising towards landowners.

The study also showed that the subsequent crisis over resource use in Panguna and the environmental disaster on Ok Tedi led to further changes in the way relations were established with kin groups in PNG. The opportunity for this came in the development of the Porgera and the Lihir Projects.

In the Porgera project 'ratification' was removed and instead 'contractual' arrangements were then pursued. The new development in relationships in Porgera was equated with 'wider consultation'. This consultation process later became known as the 'Development Forum'. Here the process was to engage the landowners in dealing with their issues. This was particularly the case with regard to landowners' issues in terms of benefits, compensation, relocation, and business opportunities as a result of the project development. Consultation as a basis for the relationship in the Porgera and later Lihir project has been seen as success in terms of project stability. But 'consultation alone' no matter how extensive, was no guarantee for kin group success in these projects. One of the major limits of 'consultation process' as a form of relationship model was the position of power. In other words, the worth of consultation for each party in processes is testable by the outcome derived as a result of that consultation. In this context social and economic consequences for landowners that resulted from the development from Porgera and Lihir suggested that development goals of landowners have not been fulfilled. While the state may have achieved economic growth, and the mining company achieved profit from the project, landowners' goals for development remain elusive. Clearly, this work argues that the forms of relationships experienced in PNG involving the 'discovery paradigm', ratification and Development Forums were forms of instrumental articulation. In all these forms, the position of kin groups was subordinated to the state and company. Thus, the study showed that PNG experiences in kin group relations in mines remained an area for further improvement.

Clearly, in PNG, the experience in the relationship between landowners and mines had taken an instrumental form of articulation, where the structure of the relationship remained problematic. Starting from the 'discovery paradigm' and ratification on one hand, and 'consultation' on the other, it can be argued that relationships had improved in terms of the process of interactions. However, it had remained distant in terms of the structural basis on which such processes take place.

8.2.4 Articulation of kin groups in the Gold Ridge project

The Gold Ridge Mining Project case study showed that the relationship between kin groups and mines remained a contested issue. This was in spite of the fact that the state, the kin groups, and the mining company were all in support of the development of the project. The state saw the Gold Ridge project as a means to promote economic growth in the Solomon Islands. The Project came at a time when forestry exploitation in the country was nearing its peak, and the expectation was that the forestry windfall would not last. Thus the state saw the Gold Ridge project as an alternative income-generating project to that of forestry. The state had also regarded the project as a way of promoting the mineral resources potential of the country, especially at the time when there was encouraging mineral project development in the region. This was during the period when Lihir Mining project in PNG was also being developed. The world market price for gold was also high, at the rate of US\$500 per ounce of gold. This situation strongly influenced the way the state perceived the role of the Gold Ridge project in Solomon Islands.

However, while the state was enthusiastic about the Gold Ridge Mining Project there was also apprehension about its future in terms of the outcome for kin groups. In the light of the knowledge of the Bougainville crisis and the Ok Tedi environmental disaster, the government's intention was to find the best means to accommodate landowners' concerns. Thus, the state took what it saw as a realistic approach to the issues affecting the project in terms of the conflicting demands of major stakeholders.

The Gold Ridge project, when seen in the light of other projects in the region, was a marginal project. There was no comparison with other mining projects in PNG. The Panguna mine, Ok Tedi, Porgera and Lihir projects from PNG were large-scale mining projects. The scale of the Gold Ridge project with an estimated 1 million ounces of gold was relatively marginal. Given this marginality, in the context of global competition for capital investments, the Gold Ridge project was not in a good position to dictate too many conditions. The fact that Solomon Islands was also considered an investment risk country for major projects requiring World Bank

indemnity from risks of political instability, the room for more demands was constrained on the part of the state and the landowners. The instability of gold prices, which at the time was US\$500 per ounce of gold, was seen as having potential to remain at that price for sometime. However, a decline was always possible. By considering both the local factors and the international factors described above, the government was only too pleased to see that Ross Mining NL was committed to carrying out the project. In a situation of limited choices in bargaining for more benefits, the decision of the company to pay for the relocation of landowners, compensation for disturbances, and a 100% of 1.5% gross value of exported gold and silver to be paid to the landowners and their province, was considered satisfactory. In other words, the province obtained 20% and the landowners obtained 80% of the royalties. On part of the central government, it imposed a 1.5% gross sale value of gold sold as export duty. These arrangements were seen as satisfactory by the state.

Ross Mining NL on the other hand, was pleased with the arrangement for the development of the Gold Ridge Mine. As a mining company, Ross Mining had a one hundred percent ownership of the project. It was allowed no less than a 22% investment return from the mine and given tax concessions for equipment necessary for continued mineral resource explorations. The state was not concerned about the ownership issue in the mine because of previous experiences in joint-venture projects where the state was often liable to share losses from company performance. The complexity in monitoring joint-venture accounts made the state opt for the mining company to take full ownership and responsibility for the project.

However, despite the confident position of the government over the Gold Ridge project land owners saw the deal as inequitable. The landowners had litigation lodged at the High Court of Solomon Islands on their behalf by the Melbourne law firm, Slater and Gordon, to pursue their case. They lodged their case on the same day of the signing of the special mining lease on 12 March 1997. The argument for the litigation was based on the alleged environmental threats from the tailings dam, although at the time the dam was not yet constructed. After the first hearing of their case, it was withdrawn from court on the basis of lack of evidence. Thus the court considered the case as not having legitimate basis for proceeding, and therefore if pursued it could have been construed as an act of abuse of court. While this litigation did not go

through the court, the land owners' sense of marginalisation in the project was evident.

The Gold Ridge case showed that landowners' expectations from a mining project went far beyond royalty payments and compensation payments made to them for the project. The landowners expected a higher standard of housing, equal to those owned by wealthier businessmen in town. This was reflected in the demand by Willy Rone, a principal landowner, who lodged a high court claim against the company. Although he did not get the type of housing he was expecting, the company rebuilt his house on a location higher in elevation than others and made a few more adjustments to make his house a few square metres wider. On the surface this seemed as if the issue was only about housing standard. But the motive was based on the landowners' thinking that, as landowners, they deserved a higher and a wealthy status because the mining project is on their land. In other words, the landowners deserved a higher standard of living that should be expressed through the type of housing they live in, and other associated modern facilities equated with modern development. They were not expecting simple compensation for inconvenience caused to them, but rather were expecting the value of the mineral resources.

The government was aware of the kin group expectations about the mining project. The way the state attempted to address expectations was to establish local institutional structures to enable the process of negotiation. The institutional changes involved the amendment of the Mines and Minerals Act to provide for an account held by government to allow royalties to be paid. In this way royalties were given to the landowners, because under the existing law, mineral resources belong to the state, and this included royalties. The state also assisted the landowners in the establishment of their local organisation (the Gold Ridge Landowners Association). Funds were made available under government arrangements so that landowners could have seed money to run their organisation. These actions were seen by the state as moves towards improving landowner conditions in the mining project. The state was also able to set up inter-departmental committees to assist in the facilitation of the project. The state's technical advice was sourced through a legal advisor and an economic advisor from the Commonwealth Secretariat before the negotiation was set in motion. The feasibility report by the company, cross-examined by the government's

environmental and engineering consultants, was the basis for negotiating the terms the government could agree to. However, the study showed that it was not sufficient that technical information be confined to the state. The community's knowledge about the technical and practical reality of the mine would have been useful if sufficient emphasis would be placed on providing greater information about financial limitations of mining. Lack of knowledge about the technical feasibility and the financial viability of the Mining Project on the part of kin groups was a major basis for suspicions about the Gold Ridge Mine. In other words, there was a problem of definition of kin group entitlements in mineral resource development in the Gold Ridge project. Clearly, while the state assumes legal ownership of mineral resources, kin groups assume customary ownership of minerals. While the state considers compensation and royalty payments as sufficient entitlements from mineral resources for kin groups, kin groups consider themselves as equals in the distribution of benefits derived from mineral resources, and therefore their expectation was to share the value of the worth of the mineral resources. Thus the problem of reconciling kin groups and mineral resources development is also a problem of defining kin group roles in contemporary Solomon Islands society.

The Gold Ridge project in Solomon Islands, and the four additional mining cases in PNG, were used as case studies to demonstrate the principal arguments of this thesis. This thesis has shown that the nature of the relationship between kin groups (landowners) and natural resource projects was instrumental. This was a form of articulation rooted in the historical structures from which modern states derive their origin and that have persisted into the present. Therefore, despite some significant changes in the processes through which relationships were established over natural resource development, the persistence of the historical structures that influence these relations remains and is the major basis for contradictions that give rise to landowner disillusionment and rent seeking attitudes. This form of articulation contributes significantly to the way in which kin groups behave towards projects.

In Solomon Islands, the establishment of the Protectorate Administration in 1896 and subsequent land law reforms were the basis for the early introduction of instrumental articulation. The concept of the state as having a legitimate right over natural resources fundamentally challenged the indigenous conception that 'all things' making

up their land belong to their group. The ideas of state rights over natural resources presented a major difference between the state and indigenous people. This was expressed in all natural resources including land, forest, and mineral resources. What became clear was that landowners were expendable for the state. Whether it was in the issue of forestry or mineral resources, state ownership and control became the significant basis for all future relationship with landowners in Solomon Islands

The remainder of this chapter will outline what has been learned from this study, what such knowledge implies for the future of mining development relations in Solomon Islands, and some indications of areas where future research can be directed.

8.3 What is Learned from this Study?

This study confirms the suspicion that the relationship between kin groups and natural resource development projects is a significant problem. This problem is related to several factors. The first factor is that of land. Land ownership and mineral resource ownership must make sense to landowners. This is important because land ownership and mineral resource rights constitute one and the same thing for the landowners. Land in Solomon Islands is largely processed in a customary manner and it is an inherent feature of Solomon Islands traditional society to expect that mineral resource rights are also part of this customary right. As at present, landowners do not accept state ownership of the resource because state ownership of mineral resources is associated with colonial dispossession of kin group rights. This is, in essence, the structural basis for instrumental articulation of relations over mineral resources in Solomon Islands. This situation can be rectified when the state renounces its position of direct control of mineral rights resources and places this right within the already accepted premises based on customary land. The importance of this in terms of change in existing policy by the state is based on the principle that 'there are many ways to skin a cat'. The existing distrust of the state on the part of the landowners lies in the distinction that the state has imposed on differentiating customary landownership from mineral resource rights ownerships. Recognition of the perceived rights of kin groups to minerals will allow the landowners to establish their position in terms of ownership and give them the responsibility to make decisions that involve natural resource use. The idea of responsibility is important here, because landowners could no longer blame the state for expropriating their rights but must now be

responsible for decisions made about resources. At present, no matter what the state does in the case of Gold Ridge, landowners persist in thinking that they could never take responsibility for their decisions since the state was 'cheating' them in the first place. Thus, one important factor here is to reconcile customary landownership with mineral resource rights.

The second factor is that of development itself. In other words, what is the worth of such a project to landowners, in terms of the relative 'development' contrasted with the successful members of the community at large. What level of improvement would such a project be expected to bring about to the kin groups affected? In Solomon Islands, a major project located within a particular social group is not just a project, but signifies the potential relative affluence in relations to others in the community at large. This might seem to have little economic relevance, but where social stability is vital it may well be the key towards stabilising project developments in the future. During the Gold Ridge development, this implicit expectation was shown when landowners were unhappy about the design of the relocation houses, which to them looked similar to the temporary plantation quarters common to labourers working in plantations in Solomon Islands. When I went with my staff to see the design model, I told them that this would be a problematic design. This was the last time the company came back for the government position on the design. With some minor adjustment, such as adding a few more feet to the veranda of the two-room houses, the design was pronounced satisfactory. But later this very design made some of the landowners think they were living in inferior housing, especially compared to people in towns who do not even have a mine in their back yard. This issue remained a disappointment for the landowners. Similar sentiments were raised by Willy Rone who was one of the principal landowners that litigated against the project. The company built him a house much larger than the rest, on a hill overlooking the others. But this house made him look like a chief that only looked out for himself, while his followers lived in lower quality housing.

The point in all this is that where major mining projects take place, engaging the Melanesian psyche is an important factor in project development. In other words 'the mine must also be their mine' in that it must be part of their material position. Compensation as a notion itself seems counterproductive. Any resources that result

from the project should not be framed in terms of compensation and disturbances but rather in terms of achieving relative affluence expressed at the community level and also at the personal level. The importance of community affluence in this context is vital. Thus the issues of village planning, housing development, water reticulation and even electricity and other modern necessities, are significant implicit and explicit goals of the landowners. The use of compensation gives the impression that these are temporary costs and that the actual value of benefit is yet to come from the project. When landowners eventually realise not only that their villages are not of a good standard, but that compensation money was really part of their benefit, causes resentment against the project to begin. This is especially the case once there is nothing else to show.

It seems that while the company thinks about profit and the government thinks about economic growth, the landowners expect important changes to their social, economic and political position in the community. In summary, the expectations of kin groups was that major natural resources development should lead to significant improvement of their lives. Landowners expect a comparatively high standards of progress from resource use. Here the operation of the project means a lot more than the simple production process, but rather the parallel development of the community as the project progresses.

The third factor is the widely held view that landowners do not want to be disturbed. If this is true, then the landowners should not be disturbed at all by any mining activity. But this is not the case with mining projects. When the landowners are accept mining development, it is not the fact that they should now be left alone, which is important, but rather, now that the project has commenced what are the significant changes to improve their previous lives as a result of this major destabilising project? Often the state and mining company used the logic of minimising the impact of mining on the community as the basis for not considering other significant changes that might come the landowners' way. The whole notion of compensation and disturbance payment is based on this assumption.

On the contrary, as in the case of the Gold Ridge project, it was not the issue of sheltering landowners that now became important, but rather what there was to show

for these major changes in the condition of their lives. In other words, for the landowners, after project approval it was merely the positive changes that followed that mattered. Thus it is vital that the planning of mining also includes planning for and by the community directly affected by the project.

8.4 Improving mining relations in the future

Six months after the Gold Ridge Mining Development, Guadalcanal youth formed a resistance group calling itself the Guadalcanal Revolutionary Army (GRA.). This came to be known as the 'Guadalcanal Ethnic Tension' by both local and international media. This emphasis on 'ethnicity' overshadowed some of the fundamental motivations of the conflict. For example, there were the issues of land, resource control and benefits from resource development. The major cause of the Guadalcanal conflict was the perception of being marginalised. This was demonstrated by the Guadalcanal militants' demand for reforms including:

- Constitutional Reform
- Restitution of past wrongs, and
- Equity in new economic opportunities.

The desire for constitutional reform is expressed in the demands for an adoption of a state government system. The motive behind this perception is that, by the adoption of a state government system, the newly established states, especially Guadalcanal, would be able to control resource development and receive a fairer share of benefits. A newly-established state would also be able to control and regulate customary land tenure. It was also envisaged that this would ensure that government representation in the new state would come from the people of Guadalcanal, and not someone from elsewhere using finance to buy their way into government. The movement of inter-island migration would also be regulated. In this respect, the Guadalcanal conflict that arose on December 1998, which almost destroyed the country's economy, was a resource motivated conflict rather than one based on ethnicity, as was largely presented in the media.

While there were normative demands for restitution for past wrongs, involving compensation for wrongful deaths, the demands were largely economic and political, and not necessarily ethnic. The nature of demands included:

- demand for 50% of revenue collected on Guadalcanal to be paid to the Province
- demand for 25% of SIPL ownership equity to Guadalcanal Province
- government to pay for Honiara capital city as it is located on customary land
- demand for the national capital to be relocated elsewhere

Clearly, resources have a significant bearing on the recent conflict in Solomon Islands. Paradoxically, this demand for more economic development resulted in the closure of all major economic development projects on the island, including the Gold Ridge project. This has yet not been resolved, and it remains to be seen when the project will reopen. But to date, there are suggestions for further reviewed negotiation of the project.

What the current state of affairs in the Solomon Islands shows is that the development of natural resources cannot be separated from the social institutions inherent among kin groups. Customary land and institutions of kinship are an integral part of Solomon Islands society, and therefore any development at the state level must at the same time improve institutional development at the kin group level.

Appendices

Appendix 1 : Terms of reference for the Gold Ridge project tender screening

- To ensure all genuinely interested parties are given equal opportunities to tender for Gold Ridge project
- To check and ensure tender proposals are received within the time specified and conditions required under the Tender Notice are fulfilled.
- To assess the quality and adequacy of the company proposed exploration program including drilling.
- To assess the company's technical ability to grasp the geological concepts and use of available geological information.
- To assess the geological and mining competence within the company or joint venture.
- To assess the company's experience and previous performance in exploration and mining in Solomon Islands and overseas.
- To assess the financial resources of the company.
- To assess and evaluate the company's terms and conditions, and financial package offered in the tender proposal.
- To assess the company's expenditure commitments.
- To assess the marketing competence within the company.
- To assess the proposal's conceptual content, innovation and detailed planning.
- To assess the time frame proposed for exploration and mine development
- To assess the company's attitude to training and participation of Solomon Islanders at all levels of company activities.
- To assess the company's attitude to local and landowner participation.
- To assess the company's attitude towards environmental protection measures required in Solomon Islands.
- To make recommendations for the acceptance of the successful Tenderer.

The above terms of reference were used by the Solomon Islands government in the choosing of Saracen Minerals Ltd over other applicants to win the Gold Ridge deposit. Saracen then resold the Gold Ridge project to Ross Mining NL[♦]

[♦] Source from SIG Report of findings of the Gold Ridge Tender Screening Committee 17 June 1994.

Appendix 2: Surface access rights agreement for mineral prospecting.

Dated.....1997

PARTIES

THE LANDOWNERS OF THE PROSPECTING LICENCE AREA KNOWN AS

PILOPILO LAND

SOLOMON TRY HARD MINING LIMITED

ISLAND HOPPERS & ASSOCIATES

ANNONVON

OUR ref: JK Houstan

NDBSR/DES5:37468374678

AGREEMENT made

26 July

1997

PARTIES

PILOPILO LANDOWNERS

Of

("landowners")

AND

SOLOMON TRY HARD MINING LIMITED

Care of Loopers & Lybras, City centre Building,

Honiara, Solomon Islands.

INTRODUCTION

- A. SML (an approved mineral prospecting company since 23 October 1989) has applied for the Prospecting Licences on behalf of SOLOMON TRY HARD MINING LIMITED(an approved mineral prospecting company since 23 August 1996) and presently holds the Letter of Intent in regard to the Area.
- B. The landowners are the groups of people that own the areas of land within the Area traditionally given the name in item 2 of the Schedule within the island named in item 3 of the Schedule.
- C. The Access Agreement sets out the terms and conditions under which the Company has the right to enter and carry out mineral prospecting within the Area.

IT IS AGREED

1. Definitions and Interpretation

1.1 Definitions

In this Agreement:

- (1) "Access Agreement" means this agreement, including any Schedule or Annexure to it;
- (2) "Access Fee" means the access fee described in clause 3;
- (3) "Act" means the Mines and Minerals Act 1990;

- (4) “Agreed Work Activities” means the work activities to be undertaken by the Company under clause 6;
- (5) “Area” means the land owned by the landowners within the Prospecting Licences to which this Agreement relates particular of which are set out in item 1 of the Schedule;
- (6) “Company” means SML and SOLOMON TRY HARD MINING LIMITED jointly and severally and includes their respective employees, agents, contractors and nominees;
- (7) “Compensation Fee” means the compensation fee described in clause 7;
- (8) “Dollars” means Solomon Islands dollars;
- (9) “Environmental Accident” means any unplanned or unexpected event causing significant damage or adverse impact to the physical environment;
- (10) “environmental Management Plan” means the plan to be prepared in accordance with clause 14;
- (11) “Landowner Trust Account” means the trust account to be established in accordance with the Act into which Access Fees and compensation payments are paid;
- (12) “landowners”
- (a) has the meaning set out in the Act which the date of this Agreement:

“ in relation to a registered interest means the person whose name the interests is for the time being registered and in relation to customary land, means the person or persons who is or are according to current customary usage, regarded as the owner or owners of the land”; and
 - (b) at the date of this Agreement includes the landowners named in this Agreement;

(13) “Letter of Intent” means the letter of intent from the Ministry of Mineral Resources to the Company the date of which is shown in item 5 of the Schedule;

(14) “Parties” means both the Company and the landowners as original parties to this Agreement;

(15) “Prospecting Licences” means the prospecting licences held by the Company at the commencement of this agreement particulars of which are described in item 4 of the Schedule; and

(16) “Quarter” means each 3 month period commencing from the commencement of this Agreement.

1.2 Interpretation

Reference to:

(1) the singular includes the plural and the plural includes the singular;

(2) a person includes a body corporate;

(3) a party includes the party’s executors, administrators, successors and permitted assigns; and

(4) a statute, regulation or provision of a statute or regulation (“Statutory Provision”) includes:

(a) that Statutory Provision as amended or re-enacted from time to time; and

(b) a statute, regulation or provision enacted in replacement of that Statutory Provision.

2. Commencement, Duration and Restraint

2.1 This Agreement commences on the date of Issue of the Prospecting Licences and continues, subject to early termination under clause 10, until the termination of the Prospecting Licence under the Act including any period renewal.

2.2 On termination of this Agreement under clauses 2.1 or 10, the parties agree that they must not seek to obtain, whether directly or indirectly, a prospecting licence or mining licence over the Area for a period of 10 years from the date of termination.

3. Access Fees

3.1 The Company must pay the landowners access Fees per Quarter set out in item 6 of the Schedule for the right to enter and carry out mineral exploration activities within the Areas.

4. Method of Payment

4.1 The Company must pay the Access Fee at the start of each Quarter. The Access Fee must be paid into the Landowner Trust Account.

5. Use of Access Fee

5.1 The landowners may use the Access Fee only for their agreed community investment and projects.

6. Agreed Work Activities During Access

6.1 The Company may carry out in the Area general mineral prospecting activities which may include the following:

- (a) collecting soil, rock and water samples for geochemical analysis;
- (b) hand trenching, being the digging of drains and/or slit trenches by hand;
- (c) mechanical or hand augering, being the drilling of small diameter holes to shallow depths by machine or hand;
- (d) electrical resistivity/IP survey (land and/or aerial);

- (e) Excavated Trenching, being the mechanical diffing of drains and/or slit trenches and costeaning via bulldozer and/or excavator;
- (f) The mechanical drilling of holes by either diamond or reverse circulation methods; or
- (g) Surveying and mapping on ground and /or aerial.

6.2 The Company may carry out in the Area various road making, camp construction and related logistical support activities.

7. Agreed Compensation Fee

7.1 The Company must pay to the landowners the compensation fee per Quarter set out in item 7 of the Schedule as compensation for the Agreed Work Activities including:

- (1) grid lines, being the clearing of vegetation by hand along narrow width survey lines;
- (2) timber and / or commercial trees and general vegetation;
- (3) rental for campsites being an area of land cleared of vegetation for the purpose of erecting semi-permanent dwellings for Company employees;
- (4) helicopter pads, being an area of land cleared of vegetation for the purpose landing a helicopter;
- (5) drill sites, being an area of land cleared of vegetation and the ground levelled to allow the erection of a drill rig; and
- (6) bulldozed access roads and tracks.

8. Methods of Payment of Compensation Fees

8.1 The company must pay the Compensation Fee at the start of each Quarter. The Compensation Fee must be paid into the landowners Trust Account.

9. Use of Compensation Fee

9.1 The Compensation Fee must be distributed by the Landowner Trust Account operators as nominated by the various bona fide clans and /or families upon whose land the Agreed Work Activities and/or activities detailed in clause 7.1 are carried out.

10. Termination of this Agreement

10.1 Both the Company and the landowners have full and equal right to terminate this Agreement by giving 90 days notice in writing.

10.2 The Company may only give notice of termination of this Agreement by unanimous decision of the board of directors of the Company .

10.3 The landowners may only give notice of termination of this Agreement:

(1) by unanimous decision of the landowners; and

(2) where the termination is not part of any scheme to grant similar access rights to any person within 5 years of the termination of this Agreement.

11. Meetings to Report Work Progress

11.1 The Company and the landowners representatives must meet once per Quarter to discuss progress results and problems relating to the Agree Work Activities.

11.2 Notice of the time and place for quarterly meetings must be given to the Landowner representatives 2 weeks in advance.

11.3 The Company will provide transport from home villages to the agreed meeting place for the landowners representatives to attend the quarterly meetings.

11.4 Where any Landowner representative cannot attend the quarterly meeting that Landowner is to provide a suitable substitute representative who is empowered to act on behalf of the absent Landowner.

12. Progress Reports

12.1 The Company shall provide a written report at each quarterly meeting to report work progress and results to landowners.

12.2 The quarterly progress reports must be based on the Company's statutory report to the Government and must be written in a manner to facilitate local understanding of technical information. Quarterly progress reports must be presented within 1 month of the lodgement by the Company of its statutory report with the Government.

13. Historic Places

13.1 The landowners, with the assistance of the Company, must identify and map all historic places, graves sacrificial sites and any sites of cultural interest within the Area of Agree Work Activities. These must be certified to the Company by the landowners and the Ministry of Culture before the commencement of any Agreed Work Activities.

14. Environmental Management Plan

14.1 The Company will negotiate an appropriate Environmental Management Plan with the landowners and the Solomon Islands Department of Minerals.

14.2 The Environmental Management Plan and its implementation in respect of the Agreed Work Activities must comply with any requirements of the Act and/or related Provincial Government Ordinances.

14.3 As part of the Environmental Management Plan to be negotiated under clause 14.1, the Company must initiate an environmental data collection carried out in their headwaters. The environmental data collection program must be initiated at the commencement of the Agreed Work Activities even if agreement on an Environmental Management Plan has not been reached.

14.4. The Environmental Management Plan will also stipulate that if an Environmental Accident is caused by the Agreed Work Activities the company must make every

reasonable effort to restore the environment and where necessary pay an agreed amount of compensation to the Landowner Trust Account for damages.

15. Subsequent Development

15.1 If the Agreed Work Activities lead to the commercial discovery of mineral deposits in the Area, the parties must use their best endeavours to reach agreement on the terms for surface rights for mining of the deposits.

15.2 If the parties cannot reach agreement under clause 15.1, the parties must not in any manner seek to be involved, whether directly or indirectly, in any effort or action to obtain a mining licences or mineral right in the Area.

16. Assignment

16.1 If SML transfers the Prospecting Licences to SOLOMON TRY HARD MINING LIMITED, the landowners agree that this Agreement continues between the Landowners and SOLOMON TRY HARD MINING LIMITED and with SOLOMON TRY HARD MINING LIMITED as the owner of the Prospecting Licences.

17. Dispute Resolution

17.1 Where a dispute arises between the parties in relation to the interpretation or operation of this Agreement the parties agree to submit the dispute for determination by the Ministry responsible for administration of the Act.

18. Change of Agreement

18.1 The Company and the landowners may vary and /or change any aspects of this Agreement where all parties are in full agreement with the variation/or change.

19. Review of Agreement

19.1 It is understood by all Parties that this Agreement is being made with the intention that geologic results and environmental management will be

reviewed on an ongoing yearly basis and where necessary, agreed changes will be made under clause 18.1.

20. Agreed Work Programmes

20.1 All agreed work activities are to be carried out in stages via agreed work programmes that require landowner approval in advance before such activities can commence.

20.2 Where landowners of a particular area of land do not agree to a work programme then the Company shall attempt to carry out the work programme in any such particular area of land.

The Schedule

Item 1	Area of Land known as	Pilopilo Land
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Item 2	Traditional District Name within Area	OBMIS
--------	---------------------------------------	-------

Item 3	Island Name	Obmis Island, Western Province
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Item 4	Prospecting Licence Details	Starting at a point to the north-west of Obmis Island at UTM grid coordinate of 9089000 North and 227000 East thence, eastwards along the 9089000 North grid line to the point 908900 and 230000 East thence, southwards along the 23 0000 east thence, westwards along the 9084000 North grid line to the point 9084000 North and 2290000East thence, southwards along the grid line 229000 East to the point 9081000 North and 226000 East thence, northwards along the 226000 East grid line to the point 9084000 North grid line to the point 9084000 North and 227000 East thence, northwards along the grid line 227000 East to the starting point at 9089000 North and 227000 East.
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Item 5	Date of Letter of Intent	13 December 1996
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Item 6	Access Fee Per Quarter (Solomon Island dollar)	\$7, 500.00(Seven thousand five dollars only)
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Item	Compensation Fee per Quarter (Solomon Island dollars)	To be negotiated with secondary and tribal landowners.
------	---	--

EXECUTED as an agreement,

Signed by the Landowners:

.....
Signed for and on behalf of SOLOMON TRY HARD MINING LIMITED
.....

Appendix 3: The Gold Ridge Mining agreement, Solomon Islands

THE GOLD RIDGE MINING AGREEMENT
SOLOMON ISLANDS

BETWEEN

THE GOVERNMENT OF SOLOMON ISLANDS

AND

ROSS MINING (SOLOMON ISLANDS) LIMITED

AND

GOLD RIDGE LIMITED

AND

ROSS MINING N.L.

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GOLD RIDGE MINING AGREEMENT

THIS AGREEMENT is made on the 7th day of March 1997 BETWEEN THE GOVERNMENT OF SOLOMON ISLANDS (the "Government") represented by the Minister for Energy, Water and Mineral Resources; and ROSS MINING (SOLOMON ISLANDS) LIMITED (formerly Saracen Minerals (Solomon Islands) Limited), a company incorporated under the law of Solomon Islands and having its principal place of business at Coopers and Lybrand, 1st Floor City Centre Building, Mendana Avenue, Honiara, Solomon Islands ("Ross Solomon Islands"); and GOLD RIDGE MINING LIMITED, a company incorporated under the law of Solomon Islands and having its principal place of business at Pakoe Road, East Gold Ridge, Kola Ridge, Honiara, Solomon Islands ("Mining Company") and ROSS MINING N.L., a company incorporated under the law of the State of Queensland, Australia, and having its principal place of business at Level 3, 189 Coronation Drive, Milton, Queensland, 4064, Australia ("Ross Mining").

WHEREAS:

- A. Ross Solomon Islands, then known as Saracen Minerals (Solomon Islands) Limited, tendered for and was issued Special Prospecting Licence No. 185 by the Government dated 4 August 1994 ("the Gold Ridge SPL"), and presently holds the Gold Ridge SPL;
- B. Ross Mining is the parent company of Ross Solomon Islands;
- C. Gold Ridge Mining Limited is a wholly owned subsidiary of Ross Solomon Islands and will undertake Project Operations under this Agreement as the Mining Company;
- D. Ross Solomon Islands wishes to be assured by the Government of all terms and conditions for mining and marketing minerals if, after evaluating the existing gold and other mineralisation in the Prospecting Area and further exploring the Prospecting Area, Ross Solomon Islands discovers a deposit of gold or other valuable minerals, and, after due consultation with the Government, decides this deposit to be commercially viable for development as a mine; and
- E. The Government wishes to co-operate with Ross Solomon Islands and Ross Mining to encourage:
 - (a) the efficient and economic development of any such deposit in accordance with good international mining industry practice; and
 - (b) the operation of a mine and minerals processing facility on terms and conditions that will secure significant financial and other benefits for the Government and the people of Solomon Islands and appropriate benefits for Ross Solomon Islands, Ross Mining and the Mining Company commensurate with their risks;

NOW, THEREFORE in consideration of the above and of the mutual rights, obligations and covenants contained in this Agreement, and for other good and valuable consideration, the parties agree as follows:

1. INTERPRETATION AND DEFINITIONS

1.1 Interpretation

In this Agreement, unless the context otherwise requires:

- (a) words importing the singular include the plural and vice versa;
- (b) words importing any gender include the other;
- (c) the headings do not affect the interpretation or construction of this Agreement;
- (d) reference to a party to this Agreement includes that party's successors and permitted assigns;
- (e) reference to a statute includes all amendments to that statute for the time being in force and also to any statute consolidating or replacing the statute;
- (f) reference to a statute includes all regulations, and other subordinate legislation including proclamations and legal notices made under that statute;
- (g) reference to a clause is to a clause of this Agreement; and
- (h) the schedules and annexures form part of this Agreement.

1.2 Definitions

In this Agreement the following words and terms shall have the following meanings, unless the context otherwise requires or otherwise specified herein:

- (1) "Affiliated Company" means any person, firm or company, directly or indirectly, controlling, controlled by or under common control with Ross Mining, Ross Solomon Islands or the Mining Company;
- (2) "Agreement Area" means the area covered by the Gold Ridge SPL;
- (3) "Ancillary Authorisation" means all other licences, permits, rights or approvals of the Government or Provincial Government or Local Government that are necessary for the carrying out of the Project other than the Gold Ridge SPL and the Mining Lease and does not, in any case, include a prospecting licence or a mining lease issued pursuant to the New Mining Act;

- (4) "Applicable Law" means the law of Solomon Islands including the statutory law, regulations and all other instruments having the force of law, from time to time in force;
- (5) "Date of Commencement of Commercial Production" means the first day of the calendar quarter following the quarter in which the cumulative gold production equals fifteen per cent (15%) of the Project's constructed initial annual design capacity;
- (6) "Development Expenditure" means expenditure incurred, whether directly or indirectly, in or in connection with the carrying out of Development Operations in or in connection with the Agreement Area, including General and Administrative Expenditure directly connected with Development Operations, and expenditure relating to such operations incurred in respect of:
- (i) the acquisition of machinery, implements, utensils and other articles and the leasing of fixed and mobile plant, buildings and structures used for the purposes of production, treatment and processing and furniture, tools and equipment used in offices and export terminals, vehicles, motorised rolling equipment, aircraft, fire control, security stations, helicopter pads, tailings dams, haulage and access roads, pipeworks, electrical and fluid reticulation and water and sewage plants and power plants and all civil earth works in connection with such operations;
 - (ii) landowner relocation and resettlement and related infrastructure services and facilities;
 - (iii) wharves and landing facilities and quarantine, customs, fuel storage, port facilities and dredging, water-based earth works, barging and transport facilities;
 - (iv) labour, fuel, haulage, supplies, materials and repairs and food, accommodation, travel and related costs in connection with the drilling, laying, installation and construction of mine facilities;
 - (v) the advancement of training and education of Solomon Islands citizens at institutions approved by the Minister and the provision of educational and scientific materials and equipment by virtue of any term or condition of the Mining Lease issued in respect of such area;
 - (vi) charges, fees or rent for, or in respect of, land or buildings occupied for the purposes of carrying out Development Operations;
 - (vii) preparation of feasibility studies, applications for requisite approvals and consents, travelling, accommodation and consultants' fees (not otherwise

included under any other head of expenditure hereunder) in relation to Development Operations;

- (viii) the restoration of the Agreement Area, or any part thereof, after cessation of Development Operations in such area to the extent to which such expenditure has been incurred by virtue of any term or condition of the Mining Lease relating to safety or the prevention of pollution; and
 - (ix) customs duty and goods tax in respect of the importation for use in or in connection with Development Operations in the Agreement Area of plant, machinery, equipment, spare parts, materials, supplies or consumable items to be used in or in connection with such Development Operations;
- (7) "Development Operations" means operations relating to the development and construction of the mine under this Agreement and includes Development Operations in relation to Project Expansion;
- (8) "Exploration Expenditure" means expenditure incurred, whether directly or indirectly, in or in connection with the carrying out of Prospecting Operations in the Agreement Area, including General and Administrative Expenditure directly connected with Prospecting Operations, and expenditure relating to such operations incurred in respect of:
- (i) remote sensing including aeromagnetism and sampling in the Agreement Area, geochemistry, trenching, drill site access and preparation, drilling of all types of boreholes including diamond, rotary and reverse circulation and assaying;
 - (ii) the acquisition of machinery, implements, utensils and other articles employed for purposes of such operations;
 - (iii) labour, fuel, haulage, supplies, materials and repairs and food, accommodation, travel and related costs in relation to such operations;
 - (iv) the advancement of training and education of Solomon Islands citizens at institutions approved by the Minister and the provision of educational and scientific materials and equipment by virtue of any term or condition of the Gold Ridge SPL;
 - (v) charges, fees or rent for, or in respect of, land or buildings occupied for the purposes of carrying out Prospecting Operations;
 - (vi) tenement fees, access compensation and legal fees (not otherwise included under any other head of expenditure hereunder), in relation to such operations;
 - (vii) the restoration of the Agreement Area, or any part thereof, after cessation of

Prospecting Operations in the area to the extent to which such expenditure has been incurred by virtue of any term or condition of the Gold Ridge SPL relating to safety or the prevention of pollution; and

- (viii) customs duty and goods tax in respect of the importation for use in or in connection with Prospecting Operations in the Agreement Area, of plant, machinery, equipment, spare parts, materials, supplies or consumable items used in or in connection with such Prospecting Operations;
- (9) "Feasibility Study" means the Feasibility Study referred to in Clause 3.1;
- (10) "General and Administrative Expenditure" means expenditure incurred on general administration and management primarily and principally related to the Project Operations in or in connection with the Agreement Area, comprising and limited to:
- (i) expenditure relating to office, field office and general administration in Solomon Islands, including supervisory, accounting and employee relations services (excluding commissions paid to intermediaries by Ross Solomon Islands or the Mining Company);
 - (ii) an annual overhead charge for services rendered outside Solomon Islands and not otherwise included under any other head of expenditure hereunder, for managing the Project Operations and for staff advice and assistance including financial, legal, accounting and employee relations services, provided that:
 - (a) for the period from the date on which this Agreement is signed until the Date of Commencement of Commercial Production the annual charge shall be the Mining Company's verifiable reasonable expenditure as approved by the Commissioner of Inland Revenue and such approval shall not be unreasonably withheld; and
 - (b) for the period commencing from the Date of Commencement of Commercial Production, the annual charge shall be at an amount or rate to be agreed on between the parties and stated in the Feasibility Study approved with the grant of the Mining Lease;
- (11) "Gold Ridge SPL" means Special Prospecting Licence No. 185 dated 4 August 1994 held by Ross Solomon Islands;
- (12) "Government" means the Government of Solomon Islands and includes its Ministers, instrumentalities and any agency of the Government;
- (13) "Gross Income" shall mean total income as defined in the Income Tax Act and shall, in relation to the Mining Company, include any amount received or receivable in the year of assessment by the Mining Company, including proceeds under a policy of

insurance or otherwise, in respect of the loss or destruction of any of the Mining Company's minerals and any interest or amount in the nature of interest or any other amount received or receivable by the Mining Company in the year of assessment from or in connection with mining operations in the Mining Area;

- (14) "Gross Value of Gold and Silver Produced" shall have the meaning assigned to it in Clause 5.3 (a);
- (15) "Licence Year" means a year ending on an anniversary of the date of the Gold Ridge SPL;
- (16) "Mining Area" means the area covered by the Mining Lease plus any addition thereto as may be approved by the Government to include any areas of proven reserves contained in the Prospecting Area;
- (17) "Mining Company" means Gold Ridge Mining Limited;
- (18) "Mining Lease" means the Mining Lease referred to in Clause 3 and includes an renewal of that Lease under the New Mining Act;
- (19) "Net Cash Receipts" for the Tax Year in respect of which an assessment is being made means the result denominated in Australian dollars, which may be a negative amount obtained by aggregating:
- (i) the Gross Income for that Tax Year;
- and subtracting therefrom the sum of:
- (ii) income tax paid in that Tax Year; and
 - (iii) all Exploration, Development and Production Expenditures as defined in Clause 1.2 and allowed in that Tax Year in accordance with the Applicable Law relating to Additional Profits Tax including royalty paid but excluding amounts in respect of interest and other financing charges on loans raised for the Project;
- (20) "New Mining Act" means the Mines and Minerals Act 1990 as amended from time to time and includes all regulations made or in force thereunder;
- (21) "Old Mining Act" means the Mining Act - Cap 91 as amended from time to time and includes all regulations made thereunder;
- (22) "Present Value of Net Cash Receipts" means the Present Value of Net Cash Receipts ascertained in accordance with Clause 6.3 (c);

- (23) "Production Expenditure" means expenditure incurred in Production Operations and which, subject to the Applicable Law relating to Additional Profits Tax, is allowed as a deduction in the determination of chargeable income under the Income Tax Act;
- (24) "Production Operations" means operations carried out under the Mining Lease other than Development Operations and, in the case of Project Expansion, operations carried out under the Mining Lease other than Prospecting and Development Operations;
- (25) "Project" means the exploration operations carried out under the Gold Ridge SPL and the construction, development, mining, de-commissioning and rehabilitation operations carried out under the Mining Lease according to this Agreement. It includes all facilities, including ancillary facilities and infrastructure, constructed and developed that are reasonable and necessary for the Project according to good international mining industry practice. It also includes (but is not limited to) facilities for concentrating, transporting, shipping and selling minerals and transporting plant and equipment to and from the Mining Area from and to local or overseas destinations and includes Project Expansion;
- (26) "Project Expansion" means an expansion of the Project undertaken by the Mining Company in the Mining Area, including the construction of additional tailings dams and haulage roads, to improve the efficiency of Project Operations or to increase the throughput of Project Operations ;
- (27) "Project Operations" means the operations for and in connection with the Project carried out under this Agreement;
- (28) "Prospecting Area" means the area in Solomon Islands as described in Annex 'A' or as varied upon application by Ross Solomon Islands to renew the Gold Ridge SPL but shall not include the Mining Area;
- (29) "Prospecting Operations" means prospecting operations carried out under the Gold Ridge SPL other than Development Operations;
- (30) "Provincial Government" means the government of Guadalcanal Province of Solomon Islands, and includes its Ministers, instrumentalities and agencies;
- (31) "Tax Year" means a year commencing on 1 July in a year and ending on 30 June the following year; and
- (32) "the Minister" means the Minister of the Government for the time being responsible for mineral resources.

2. GOLD RIDGE SPECIAL PROSPECTING LICENCE

2.1 Exploration Operations

Ross Solomon Islands shall continue to carry out exploration, prospecting and other Project Operations in accordance with the requirements of the Gold Ridge SPL, this Agreement and the Applicable Law.

2.2 Changes in the Prospecting Programme

Ross Solomon Islands may, after due consultation with the Government, make such changes in the details of the approved prospecting programme during the term of the Gold Ridge SPL which are necessary and prudent in accordance with good international mining industry practice.

2.3 Credit for Over-Expenditure

In the event that Ross Solomon Islands spends more than the amount of the minimum expenditure commitment in any Licence Year, the amount of over-expenditure shall be carried forward and credited against the minimum expenditure commitment for the next following Licence Year, so as to reduce the minimum expenditure commitment for that Licence Year.

2.4 Surrender

Ross Solomon Islands may, at its option, surrender the Gold Ridge SPL during a Licence Year provided it has fulfilled the minimum work and expenditure commitment as required by the Gold Ridge SPL relating to the Licence Year in which such election to surrender is made and previous Licence Years. Any amount required to be expended on exploration operations pursuant to Clause 2.1 by Ross Solomon Islands and not so expended shall be a debt due to the Government and payable by Ross Solomon Islands prior to surrender of the Gold Ridge SPL.

2.5 Force Majeure Extension

Where Ross Solomon Islands or the Mining Company is prevented from carrying on its operations under the Gold Ridge SPL because of force majeure, the term of the Gold Ridge SPL shall, subject to Clause 16, be extended by a period equal to the period for which the force majeure event in question subsisted.

3. MINING LEASE

3.1 Application for Mining Lease

In the event that Ross Solomon Islands discovers in the Prospecting Area a mineral deposit which Ross Solomon Islands believes capable of being economically mined and the minerals therefrom marketed, Ross Solomon Islands may, not later than three (3) months before the expiry of the initial term, or (where, subject to the New Mining Act and the minimum work and expenditure obligations acceptable to the Government in respect of such renewal, upon application duly made by Ross Solomon Islands for a renewal of the Gold Ridge SPL, the

renewal is granted under the New Mining Act) the renewal period of the Gold Ridge SPL, make an application for a Mining Lease. The application shall set out the key Ancillary Authorisations required for the implementation of the Project and the proposed financing plan. The application shall be accompanied by a Feasibility Study which shall include the following:

- (a) a description and a plan of the area over which the Mining Lease is sought;
- (b) a description of the mineral deposit with a comprehensive report thereon including details of the grade and quantity of the proven and probable ore reserves and the anticipated mining conditions, with comments on possible ore reserves;
- (c) a technological report on mining and ore treatment possibilities and proposals thereon;
- (d) a proposed mining plan, which shall include:
 - (i) the proposed Date of Commencement of Commercial Production;
 - (ii) the proposed facilities, scale of operations and production capacity;
 - (iii) the proposed processing plan and estimated overall recovery of ore and mineral products; and
 - (iv) the proposed marketing arrangements for the sale of the mineral products including the proposed transport arrangements and the proposed arrangements for the sale of gold;
- (e) an environmental impact statement based on a scope of work previously agreed upon with the Minister;
- (f) a detailed programme for the reclamation and rehabilitation of lands disturbed by the Project and for the minimisation, control and joint monitoring of the effects of mining on air, land, and water, based upon previously agreed environmental standards. Such programme and standards shall:
 - (i) be in accordance with good international mining industry practice;
 - (ii) reasonably anticipate damage to air, land, water, persons, vegetation, and marine and animal life;
 - (iii) appropriately recognise the costs and benefits of environmental protection in relation to the benefits of the Project; and
 - (iv) reasonably recognise the effect the Project must necessarily have on the environment;

- (g) a reasonably detailed forecast of capital investment, operating costs and sales revenues;
- (h) a report on the anticipated employment requirements for the Project and a programme for the employment and training of Solomon Islands citizens, specifying for each year:
 - (i) the anticipated number of citizens to be in the programme;
 - (ii) the scope and content of the training courses; and
 - (iii) the anticipated costs thereof;
- (i) a report of the Project's anticipated requirements for goods produced in Solomon Islands and for services which may be obtained within Solomon Islands, and Ross Solomon Islands' intention in relation thereto;
- (j) the details of the proposed infrastructure plan; and
- (k) the details of the proposed resettlement programme for the owners and occupiers of land in the Mining Area.

3.2 Grant of Mining Lease

Not later than six (6) months after the date of the submission of the application, the Mining Lease shall be granted by the Minister to the Mining Company if the application proposes plans and programmes in accordance with good international mining industry practice which:

- (a) provide for the reasonable development of the mineral deposit or deposits in a manner consistent with the reasonable interests of the people of Solomon Islands in relation to the Project;
- (b) reasonably protect the environment taking into account the effect the Project must necessarily have on the environment;
- (c) recognise the importance of the programme for the employment and training of Solomon Islands citizens;
- (d) recognise the Government's desire for the Project to proceed and to be economically viable, consistent with securing a reasonable return on investment to Ross Solomon Islands, Ross Mining and the Mining Company, commensurate with their risks, and significant financial and other benefits for the Government and the people of Solomon Islands; and
- (e) complies with the New Mining Act.

3.3 Form of Mining Lease

Once approved, the plans and programmes referred to in Clause 3.1 shall be incorporated in and form part of the Mining Lease. The Mining Lease shall not contain terms or conditions inconsistent with this Agreement. The environmental, reclamation and rehabilitation programme and the programme for the employment and training of Solomon Islands citizens shall be incorporated in the Mining Lease as annexes thereto.

3.4 Rights Under the Mining Lease

The Mining Lease shall grant to the Mining Company the exclusive right to mine the mineral deposit or deposits in the Mining Area and sell or otherwise dispose of and market the minerals so mined therein for a term of twenty-five (25) years. The Mining Lease shall be subject to renewal for an additional term or terms not exceeding ten (10) years each on such terms and conditions as the parties may agree at the time of such renewal. The Mining Lease shall also grant to the Mining Company the following rights:

- (a) to make all necessary excavations to mine the mineral deposit or deposits in the Mining Area and to re-work mine tailings and dumped materials;
- (b) to erect, construct and maintain in the Mining Area such plant, machinery and buildings, workshops, pipeline and other production facilities as are necessary or convenient for mining and milling operations;
- (c) to stack products or dump any waste products of mining or mineral processing operations, including tailings;
- (d) to erect, construct and maintain houses, buildings, amenities and incidental facilities for the use of the Mining Company, its contractors, agents and their employees and their immediate families;
- (e) Subject to the Rivers Water Act 1969, to take and use water from waterways and bores, and to lay water pipes and make water races and ponds, dams and reservoirs and divert and use any water necessary for the Project, provided that, if economical and practical, any water so diverted shall be returned to its natural channel;
- (f) Subject to the Telecommunication Act, to construct and maintain all transportation and telecommunication facilities and conveniences in the Mining Area and such other areas as specified in the approved Feasibility Study as may be necessary or convenient to carry out the Project;
- (g) to take and use quarry stone, gravel and other materials from the Mining Area for the construction and operation of the Project;
- (h) after due consultation with the Government, to adjust production schedules and operating rates and, in the case of manpower levels, make changes thereto (it being

understood that minor changes to manpower levels will not require prior consultation with the Government) as necessary and prudent to respond to temporary operating conditions in accordance with good international mining industry practice;

- (i) to have such road access, as approved by the Minister, to the Prospecting Area and the Mining Area and to the port from the nearest public road for the purposes of the Project; and
- (j) to engage in all such other activities as are reasonably necessary or convenient to carry out the Project.

All rights granted under the Mining Lease shall be exercised in accordance with the approved plans and programmes in the Mining Lease, good international mining industry practice and Applicable Law.

3.5 Adjustments To Plans and Programmes and Project Expansion

- (a) It is recognised that changes in the plans and programmes in the Mining Lease will be necessary during its term, including changes in production schedules, operating rates and manpower levels in connection therewith to respond to operational or international market conditions. Therefore, the Mining Company, after due consultation with the Government, may make such changes in the details of such plans and programmes as are necessary and prudent in accordance with good international mining industry practice.
- (b) Where the Mining Company proposes to carry out a Project Expansion in respect of Project Operations not adequately covered in the approved Feasibility Study, the Mining Company shall make an application for the approval of the Government to the proposed Project Expansion submitting its detailed proposals for the Project Expansion, updating of the approved Feasibility Study and variation of the plans and programmes to incorporate the proposed Project Expansion. Not later than four (4) months after the date of the submission of the application, the approval to the Project Expansion shall be granted by the Minister to the Mining Company if the application proposes plans and programmes in accordance with good international mining industry practice which:
 - (i) provide for the reasonable development of the mineral deposit or deposits in a manner consistent with the reasonable interests of the people of Solomon Islands in relation to the Project;
 - (ii) reasonably protect the environment taking into account the effect the Project must necessarily have on the environment;
 - (iii) recognise the importance of the programme for the employment and training of Solomon Islands citizens; and
 - (iv) comply with the New Mining Act.

3.6 Grant of Ancillary Authorisations

- (a) Once proper application has been made in accordance with Applicable Law, the Government shall expeditiously and, in any case, within three months of the date of the application therefor expeditiously authorise or grant to the Mining Company such other licences, permits, rights or approvals as are necessary for the purpose of carrying out the Project. The rights under such authorisations shall be exercised in accordance with Applicable Law.
- (b) The Government shall establish a coordinating committee of all relevant Ministries and Departments under the chairmanship of the Permanent Secretary of the Ministry of Energy, Water and Mineral Resources or his designate to coordinate the expeditious grant in accordance with Applicable Law, upon proper application therefor, of the Ancillary Authorisations required by the Mining Company for the Project Operations.
- (c) The parties shall periodically meet to discuss and review the progress and implementation of the Project and to deal with any issues arising therefrom.
- (d) Any issue or disagreement between the parties as to whether an Ancillary Authorisation is, in fact, necessary or required for the implementation of the Project or any technical matter arising out of the terms and conditions of an Ancillary Authorisation granted pursuant to Clause 3.6(a) shall be referred to an independent sole expert competent on the subject matter to be appointed by agreement between the parties and, failing such agreement, by the President of the International Chamber of Commerce in Paris and the decision of such expert shall be binding upon the parties.

3.7 Provision of Land

- (a) The Government shall, on such terms and conditions as it may determine, allocate appropriate land to the Gold Ridge landowners and grant such title therein to the landowners as is satisfactory to the landowners to enable the Mining Company to construct and establish the resettlement village with appropriate facilities and amenities to resettle the landowners in accordance with the approved resettlement programme.
- (b) The Government shall, on such terms and conditions as are generally applicable in Solomon Islands and at reasonable rent, grant to the Mining Company appropriate land under a land lease for the duration of the Project to enable the Mining Company to construct a company jetty and backup storage and customs facilities at a location approved by the Government to service the Project in accordance with the approved Feasibility Study.

3.8 Existing Services and Facilities

The Mining Company shall, for the purposes of the Project, reasonably use existing Government services and facilities such as ports, airports, roads and other facilities which are publicly owned, subject to reasonable and appropriate user charges, which use shall be

in accordance with Applicable Law. Where any existing facility can after upgrading be used as aforesaid, the Mining Company shall assist the Government in upgrading such facilities on such terms as approved by the Government.

3.9 Additional Infrastructure and Services

- (a) Except as otherwise provided in this Agreement, the Mining Company shall fund and construct all additional infrastructure facilities necessary to carry out the Project as specified in the approved Feasibility Study. The Mining Company shall maintain any such additional facility for so long as such facility may be necessary to carry out the Project. Such construction and maintenance shall be in accordance with good international mining industry practice and Applicable Law.
- (b) The Government shall during the term of this Agreement provide appropriate police, postal and telecommunication services at a standard reasonably required to serve the Mining Company, its contractors and agents and their employees and their immediate families.
- (c) The Mining Company shall provide at its expense such additional medical facilities and services in the Mining Area as are necessary for its employees and persons engaged in Project Operations as specified in the approved Feasibility Study. Such facilities shall be constructed and such services shall be provided in accordance with Applicable Law. The Mining Company shall make such facilities reasonably available to other persons resident in or who have their place of business in the Mining Area, if any.
- (d) If the approved Feasibility Study provides for the construction of a township within the Mining Area, the Mining Company, in constructing the township, shall provide at its expense according to Applicable Law additional educational and other facilities and services including schools and social amenities that are necessary for its employees, contractors, agents, and their immediate families. The Mining Company shall also make the facilities and services reasonably available to any other persons residing in, or with their place of business in, the Mining Area or the township area.
- (e) The additional infrastructure facilities referred to in Clause 3.9(a) include but are not limited to:
 - (i) conveying and transportation systems in the Mining Area and on public and private roads that are necessary or desirable for transporting people, plant, equipment, materials and mineral products both within the Mining Area and to and from the Mining Area, including roads and port facilities;
 - (ii) a port or wharf facility to enable the Mining Company to land in Guadalcanal and deliver to the Mining Area all plant, equipment and materials required for the construction and operation of the Project. to re-export construction plant and equipment once their use in the construction of the Project has ceased, and to ship and transport ores, concentrates and other mineral products to overseas ports;

- (iii) an airstrip and one or more helicopter pads and associated facilities; and
- (iv) all dredged channels, cleared landing paths, tugs, pilotage and navigational aid facilities required in the operation of any port, wharf facility, helicopter pad or air strip.

3.10 Power and Water

- (a) The Government may propose to the Mining Company to provide a reliable electric power source in a timely manner to the Project on a basis acceptable to the Mining Company with regard to cost, timeliness, reliability, security and performance. In the event the Government cannot meet the Project's requirements on a timely basis the Mining Company may, subject to Clause 3.10(c) and according to Applicable Law, generate, transmit, use for its own purposes, and supply electric power to any of its facilities and those of its contractors and agents and their employees and may reasonably charge therefor.
- (b) If the Mining Company supplies electric power in terms of Clause 3.10(a), it shall subject to obtaining a licence to supply under Section 31 of the Electricity Act, Cap. 16, make available any excess power which the Mining Company considers is not required for the Project on an interruptible basis, at reasonable charges, to persons other than its contractors, agents and employees who reside or have their place of business at the same locations as the Mining Company uses such power.
- (c) Subject to not less than 12 months notice by the Government, the Mining Company shall switch from its own power generation source to the Lungga hydropower generation source as soon as the Lungga Hydropower Scheme is established and operational and is able to provide reliable electric power supply in a timely manner to the Project at competitive cost and meet the Project's delivery requirements. The Government shall not, in any manner, be subject to any penalty for this switch.
- (d) Any issue or disagreement as to the reliability of the Lungga power supply for the purposes of the Project that may arise between the parties shall be referred to an independent sole expert competent on the subject matter to be appointed by agreement between the parties and, failing such agreement, by the President of the International Chamber of Commerce in Paris and the decision of such expert shall be binding on the parties.
- (e) The Mining Company may, subject to Applicable Law, take and use water for the purposes of the Project and supply water to persons other than its contractors, agents and employees who reside or have their place of business at the same locations as the Mining Company uses such water and may reasonably charge therefor.

3.11 Roads and Bridges

The Government shall grant the Mining Company road access licences to construct roads and bridges for the safe, efficient and economical operation of the Project. Such roads and

bridges shall be constructed, maintained and used in accordance with Applicable Law. The Mining Company for safety reasons, after due consultation with the Government, may reasonably designate any such road for restricted use. Where not so designated, such roads and bridges may be used by third parties to the extent that they do not unreasonably interfere with the operation of the Project. Where any person uses such a road or bridge in such a manner as to do damage thereto or to increase the cost of the upkeep thereof, the Mining Company may make a reasonable charge for the cost of such repairs or upkeep.

3.12 Rentals or Other Charges

The Mining Company shall not without the consent of the Government use land for a purpose other than for the Project. Rentals or other charges payable by the Mining Company to the Government or to any other persons under any lease, licence, permit, right or approval granted in accordance with this Agreement shall be in accordance with Applicable Law and shall be fair and reasonable, without consideration for any mineral known or supposed to be known on or under such land. All such leases, licences, permits, rights and approvals shall be extended as necessary until the expiration, surrender or termination of the Mining Lease.

3.13 Development Obligations

- (a) Following the grant of the Mining Lease and the requisite Ancillary Authorisations to the Mining Company set out in the application for the Mining Lease and the obtaining by the Mining Company of the necessary access to areas in the Mining Area required to enable the construction of the mine, Ross Mining shall cause the Mining Company, in accordance with the terms and conditions of the Mining Lease, the approved Feasibility Study and this Agreement, to (and the Mining Company shall) construct and provide the required facilities and to carry out the Project with due diligence, efficiency and economy, in accordance with good international mining industry practice. The Project shall cost not less than A\$40,000,000 up to the Date of Commencement of Commercial Production.
- (b) If the Mining Company has not carried out substantial development of the mine within a period of two years from the date of the issuance of the Mining Lease and all requisite Ancillary Authorisations specified in the application for the Mining Lease whichever date is the latest, without prejudice to any other remedy available to the Government, the Mining Company shall be liable to pay to the Government SI\$200,000 indexed to the Solomon Islands Consumer Price Index from the base year of 1996, for each month of such delay and Ross Mining shall ensure that the aforesaid amounts are duly paid; provided that if the Date of Commencement of Commercial Production does not occur, subject to the provisions of Clause 16, on or before the end of the sixth month following the sixth anniversary of the date of issuance of the Mining Lease and the requisite Ancillary Authorisations, the Government may terminate this Agreement pursuant to Clause 19.2 and, provided further that, where the Date of Commencement of Commercial Production has not occurred as aforesaid solely and entirely because of significantly adverse international market conditions

and the Mining Company is not in default, then the Government, prior to such termination, shall meet with the parties to agree on measures acceptable to the Government to satisfactorily deal with the situation and expedite the Date of Commencement of Commercial Production.

4. EXCLUSIVITY

- 4.1 The rights of Ross Solomon Islands to prospect in the Prospecting Area and of the Mining Company to mine in the Mining Area and to dispose of and market minerals therefrom are exclusive. The Government shall not grant any rights to any third party to prospect for minerals in the Prospecting Area during the term of the Gold Ridge SPL, or to mine minerals in the Mining Area or, to market minerals therefrom, during the term of the Mining Lease.

5. ROYALTY AND EXPORT DUTY

5.1 Royalty

- (a) The Mining Company shall pay to the Government a royalty equal to one and a half percent (1 1/2%) of the Gross Value of all Gold and Silver produced from the Mining Area under the Mining Lease.
- (b) The Government shall establish special funds under Section 100(2) of the Constitution of Solomon Islands to receive payments of royalty for the benefit of the Gold Ridge landowners and the Provincial Government.
- (c) The Mining Company shall, in full satisfaction of its obligation to pay royalty under the New Mining Act as set out in Clause 5.1(a), pay :
- (i) 1.2% of the Gross Value of all Gold and Silver produced from the Mining Area into the prescribed special fund for the benefit of the Gold Ridge landowners; and
 - (ii) 0.3% of the Gross Value of all Gold and Silver produced from the Mining Area into the prescribed special fund for the benefit of the Provincial Government.

5.2 Export Duty

The Mining Company shall pay to the Government an export duty of one and a half percent (1 1/2%) of the Gross Value of all Gold and Silver produced from the Mining Areas under the Mining Lease in full discharge of its obligation to pay export duty under the Applicable Law.

5.3 Calculation and Payment of Royalty and Export Duty

- (a) The Gross Value of all Gold and Silver produced from the Mining Areas under the Mining Lease for the purposes of royalty, duty and taxation shall be the London pm price fix in United States dollars as determined by members of the London Bullion Market Association for refined gold and silver as at the date of the refinery receipt, multiplied by the certified quantity of gold and silver as issued by the relevant refinery.
- (b) All gold and silver produced from the Mining Area under the Mining Lease shall be exported from Solomon Islands within sixty (60) days or shall be deemed to have been exported on the sixtieth day after production.
- (c) Royalty and export duty shall be paid not later than sixty (60) days after the last day of the month in which minerals are exported from Solomon Islands, based on actual or reasonably estimated receipts.
- (d) If minerals other than gold and silver are produced from the Mining Area under the Mining Lease and are sold separately, royalty and export duty shall be paid to the Government at the same percentage rates applicable to gold and silver based on the international fair market value of such minerals, determined, in the absence of published international market prices for such minerals, in such manner as agreed by the parties. Any issue or disagreement on the international fair market value of such minerals that may arise between the parties shall be referred to an independent sole expert competent on the subject matter appointed by agreement between the parties and, failing such agreement by the President of the International Chamber of Commerce in Paris and the decision of such expert shall be binding on the parties.

5.4 Production Statement

- (a) The Mining Company shall, not later than seven days after the end of the first calendar quarter during which minerals are produced from the Agreement Area, and thereafter not later than seven days after the end of each subsequent calendar quarter during the term of this Agreement, submit to the Minister a production statement containing the following particulars in respect of the Agreement Area :-
 - (i) the quantity of gold and other minerals produced;
 - (ii) the size of mineral stocks held at the beginning of the calendar quarter in question; and
 - (iii) the size of mineral stocks held at the end of the calendar quarter in question.
- (b) The Minister may by notice in writing addressed and delivered to the Mining Company direct that such other particulars relating to Project Operations as specified in the notice and reasonable in the circumstances be included in the production statement and the Mining Company shall comply with such request.

6. TAXATION

6.1 Income Tax

- (a) The Mining Company shall pay company income tax at the rate of 35% and according to the Income Tax Act, Cap 61 of Solomon Islands and all its subsidiary legislation from time to time applicable to resident companies provided that:
- (i) the company income tax rate applied to the Mining Company's taxable income shall not exceed 35%;
 - (ii) the rate of withholding tax on dividends paid by the Mining Company and on dividends, in respect of income derived from Project Operations, paid by Ross Solomon Islands to non-resident companies shall be nil; and
 - (iii) the additional deductions specified in Clause 6.2 shall be deductible in computing income chargeable to tax.
- (b) Income derived from monies retained outside Solomon Islands pursuant to Clause 12.5 shall be deemed to be Solomon Islands source income and taxable under the Income Tax Act. No tax paid on such income in a foreign jurisdiction shall be creditable in Solomon Islands but such tax shall be allowed as a deduction in computing taxable income under the Income Tax Act.

6.2 Deductions in the Computation of Company Income Tax

The Mining Company shall be entitled to deduct in the computation of income chargeable to Income Tax the following costs and expenses to the extent reasonably incurred and necessary to carry out the Project in accordance with good international mining industry practice:

- (a) Interest incurred by the Mining Company on loans and other approved financing arrangements in accordance with the financing plan set out in the application for the Mining Lease to finance the Project, to the extent that the rate of interest on any loan does not exceed a rate based upon an arm's length competitive third party transaction at the time the loan was made and to the extent that the loan to capital ratio does not exceed that specified in Clause 7.1;
- (b) Exploration and Development Expenditures incurred by Ross Solomon Islands and Ross Mining prior to the incorporation of the Mining Company, and Development Expenditures incurred by the Mining Company, including de-commissioning expenses, prior to the Date of Commencement of Commercial Production shall be deductible at the rate of one hundred percent (100%) in accordance with the provisions of the Income Tax Act in the Tax Year incurred with unlimited loss carry forward;

- (c) Depreciation of plant, equipment and Development Expenditures, including decommissioning expenses, incurred after the Date of Commencement of Commercial Production shall be at the rates set forth in the Income Tax Act;
- (d) Exploration and Development Expenditures incurred by the Mining Company in respect of Project Expansion shall be deductible at the rate of one hundred percent (100%) in accordance with the provisions of the Income Tax Act in the Tax Year incurred with unlimited loss carry forward;
- (e) Royalty pursuant to Clause 5.1 and export duty pursuant to Clause 5.2;
- (f) Import duties payable to the Government;
- (g) the costs and charges of operating leases of plant, equipment and Project facilities based upon arm's length competitive third party transactions;
- (h) reclamation and rehabilitation costs incurred in the Tax Year pursuant to the rehabilitation plan approved by the Government. The Mining Company shall make annual provision for such rehabilitation costs in accordance with the approved rehabilitation plan. Reclamation and rehabilitation costs shall be debited to the accumulated provision for rehabilitation in the Tax Year in which the reclamation and rehabilitation cost is incurred. Any losses or shortfall due to the accumulated provision for rehabilitation and the income of the Mining Company being insufficient to meet the total costs of reclamation and rehabilitation at the end of the life of the mine may be carried back for a period of not more than 5 years; and
- (i) Operating and other costs and expenses of the Mining Company to carry out the Project including any other tax, charge, duty or other levy (excluding income tax and Additional Profits Tax) payable under the Applicable Law;

provided that the costs of acquisition of shares by Ross Mining in Ross Solomon Islands and the Mining Company and any expenditure incurred by Ross Mining and Ross Solomon Islands in connection therewith shall not be deductible for Income Tax, Additional Profits Tax purposes or for any other purpose under this Agreement.

6.3 Additional Profits Tax

- (a) An Additional Profits Tax shall, pursuant to the Applicable Law, be assessed, and levied on and be due and payable by the Mining Company.
- (b) An Additional Profits Tax shall be payable in any Tax Year when the accumulated present value of Net Cash Receipts, at the end of that Tax Year, calculated in accordance with the formula set out below, is a positive amount, at the rate of thirty percent (30%) of that positive amount:

$$A = B (1.25) + C, \text{ where;}$$

A = accumulated present value of Net Cash Receipts at the end of the Tax Year for which the calculation is made;

B = accumulated present value of Net Cash Receipts at the end of the preceding Tax Year; and

C = Net Cash Receipts for the Tax Year in respect of which the assessment of Additional Profits Tax is made;

provided that where in any Tax Year the accumulated present value of Net Cash Receipts is a positive amount, such accumulated present value of Net Cash Receipts shall, for the purposes of determining the accumulated present value of Net Cash Receipts in respect of the immediately succeeding Tax Year, be deemed to be zero.

Annex C illustrates how the aforesaid Additional Profits Tax formula is worked and computed by reference to an illustrated working example.

- (c) The present value of Net Cash Receipts for each Tax Year shall be ascertained by multiplying the respective portion of the nominal amount of Net Cash Receipts comprising expenditures incurred on goods and services in Solomon Islands and the portion comprising expenditures so incurred outside Solomon Islands at the end of the Tax Year by a fraction X/Y where:

X = the Solomon Islands Consumer Price Index or, as the case may be, the Australian Consumer Price Index published from time to time by the Solomon Islands Government and the Australian Federal Government respectively as at the end of the Tax Year for which the calculation is made; and

Y = the Solomon Islands Consumer Price Index or, as the case may be, the Australian Consumer Price Index published from time to time by the Solomon Islands Government and the Australian Federal Government respectively as at the middle of the Tax Year in which the respective portion of Net Cash Receipts were received or expended; and

X/Y is not less than 1;

provided that where the Solomon Islands Consumer Price Index or the Australian Consumer Price Index is not published, an alternative index shall be agreed by the parties and, in the absence of such agreement, shall be determined by an independent sole expert competent on the subject matter to be appointed by agreement between the parties and, failing such agreement, by the President of the International Chamber of Commerce in Paris and the decision of such expert shall be binding on the parties.

- (d) The Additional Profits Tax shall be payable within 90 days of the end of the Tax Year concerned. Interest on the amount of Additional Profits Tax payable in any Tax Year shall accrue as of the due date at the rate of ten (10) per cent or such other rate as provided for in the Income Tax Act as penalty for late payment of income tax (hereinafter called "Accrued Interest") and shall forthwith be payable by the Mining Company within 30 days of the notification issued by the Commissioner of Inland Revenue pursuant to Clause 6.3(e).
- (e) The Commissioner of Inland Revenue shall notify the Mining Company of his assessment of Additional Profits Tax and Accrued Interest for each Tax Year. The Mining Company shall within 30 days of each quarter of each Tax Year make advance quarterly payments of Additional Profits Tax due in respect of the Tax Year based on the assessment of Additional Profits Tax for the previous Tax Year. If the amount of Additional Profits Tax paid to the Government is less or, as the case may be, more than the amount of the Commissioner's assessment, the shortfall together with Accrued Interest thereon shall be promptly paid by the Mining Company to the Government, or, the excess, if any after taking into account any other sums due from the Mining Company, by the Government to the Mining Company. This Clause shall apply, mutatis mutandis, to all payments due by the Mining Company under the Income Tax Act.
- (f) The Mining Company shall prepare with respect to each Tax Year an Additional Profits Tax statement containing the following information:-
- (i) the nominal amount of Net Cash Receipts for the Tax Year, identifying separately each of the categories of gross income and the allowable deductions provided in the Applicable Law relating to Additional Profits Tax;
 - (ii) the appropriate value of the Solomon Islands Consumer Price Index and Australian Consumer Price Index and the weighted average of the two indices used in ascertaining the present value of Net Cash Receipts for the Tax Year;
 - (iii) the accumulated present value of Net Cash Receipts for the Tax Year; and
 - (iv) the amount of Additional Profits Tax payable for the Tax Year.
- (g) The information required in terms of Clause 6.3(e) shall be presented in sufficient detail, with supporting documents, so as to enable the Commissioner of Inland Revenue to verify the timing and amount of Additional Profits Tax payments. The Commissioner may require the submission of Additional Profits Tax statements more frequently than annually but not more than twice annually in order to satisfy the aforesaid objective.
- (h) The Additional Profits Tax statement for each Tax Year shall be submitted to the Commissioner no later than 60 days after the end of such Tax Year.

6.4 Property Taxes

Ross Solomon Islands and the Mining Company shall be subject to such taxes on real property as are generally in effect on a non-discriminatory basis. Real property shall be valued without taking into account minerals or improvements on or under land.

6.5 Customs Duties

(a) Prior to the Date of Commencement of Commercial Production, customs duties and levies shall not be levied or imposed on the following items to the extent that such items are reasonable and necessary in accordance with good international mining industry practice to carry out the Project:

(i) all capital items exclusively and necessarily required for the Project;

(ii) explosives, milling, smelting, refining and welding supplies, mining and milling machinery and equipment and all other items including fuel exclusively and necessarily required for the Project;

provided that, notwithstanding the aforesaid provision, customs duties and taxes shall be payable in accordance with the Applicable Law on all food items, alcohol and spirits, cigarettes, clothing (other than special protective clothing), shoes (other than special protective shoes), toiletries, household items such as video sets and tapes, washing machines, refrigerators, kitchen utensils and commercial articles, personal vehicles, sailboat or pleasure boats, outboard engines and arms and ammunitions; and

(b) after the Date of Commencement of Commercial Production, all imported items shall be subject to customs duties and levies of general application on a non-discriminatory basis provided that industrial gases, industrial chemicals and reagents, grinding balls, spare parts for grinding mill, mill liners, explosives, carbon and heavy duty tyres (four wheel drive and above) exclusively and necessarily required for the Project shall be exempt from customs duties and no customs duties and taxes shall be payable on fuel exclusively and necessarily required for the Project.

(c) In the event that items on which no duties or levies, or reduced duties or levies, are paid, are thereafter sold, exchanged or transferred in Solomon Islands and not re-exported (other than to the Government), (within the period of the first two years after the relevant date of importation) Ross Solomon Islands and the Mining Company shall be liable for the payment of customs duties, and levies, to the extent not previously paid, on the then fair market value of such items.

(d) The Mining Company shall pay goods tax on all fuel imports and all other items required for the Project provided that imported capital items (other than fuel) and industrial gases, industrial chemicals and reagents, grinding balls, spare parts for grinding mill, mill liners, explosives, carbon and heavy duty tyres (four wheel drive and above) exclusively and necessarily required for the Project shall, during the period prior to the Date of Commencement of Commercial Production, be exempt from goods tax.

6.6 Taxes on Expatriate Employees

All expatriate employees of Ross Mining, Ross Solomon Islands, the Mining Company, and their contractors and agents, engaged in operations under this Agreement shall be subject to such taxes as are generally in effect in Solomon Islands, only on their Solomon Islands source income derived from such operations, on a non-discriminatory basis, whether or not paid in Solomon Islands provided that, without prejudice to Clause 6.7, during the period prior to the date of commencement of production, such expatriate contractors shall be exempt from income tax on their fees derived from Project Operations under this Agreement and they shall not, during such period, be entitled to any allowances under the Income Tax Act.

6.7 Withholding Taxes on Non-Solomon Islands Contractors

Ross Solomon Islands and the Mining Company shall withhold taxes on behalf of the Government, from the gross payments made to non-Solomon Islands contractors, for services performed by such contractors and their subcontractors in Solomon Islands at the fixed rate of seven percent (7%).

6.8 Withholding Tax on Interest

Interest paid to a non-Solomon Islands lender or non-resident company by Ross Solomon Islands or the Mining Company with respect to their borrowings relating to the Project shall be subject to withholding tax at the fixed rate of five percent (5%) of such interest without prejudice, however, to any specific exemption available to any entity currently under the Income Tax Act.

6.9 Other Taxes and Levies

Without prejudice to Clauses 6.6, 6.7, and 6.8, no tax, duty, fee or other impost shall be imposed on Ross Mining, Ross Solomon Islands or the Mining Company in respect of income derived from Project Operations under this Agreement or in respect of any property held or thing done for any purpose authorised or contemplated hereunder other than -

- (a) Royalty payable under Clause 5.1;
- (b) Export duty payable under Clause 5.2;
- (c) Income Tax in accordance with the provisions of Clause 6.1;
- (d) Additional Profits Tax at the rates and calculated in the manner provided in Clause 6.3;
- (e) Property taxes as provided in Clause 6.4;
- (f) Subject to the provisions of Clause 6.5, customs duties and levies at the applicable rates pursuant to the Applicable Law;
- (g) Sales tax and capital gains tax under the Applicable Law;

- (h) Subject to Clause 6.5(d), goods tax under the Applicable Law;
- (i) Taxes, duties, fees or other imposts for specific services rendered on request or to the public or commercial enterprises generally, registration fees, licence fees and any other tax, duty, fee or other impost of a minor nature and generally applicable to businesses in Solomon Islands and the generally applicable rent due in respect of any land rights granted or assigned to the Mining Company;
- (j) Local Government and Provincial Government rates or taxes not in excess of those generally applicable in Solomon Islands;
- (k) an annual fee of SI \$ 50,000 (indexed to the Solomon Islands Consumer Price Index from the base year of 1996) payable to the Bolomona Area Council; and
- (l) Stamp duties.

6.10 Approved Infrastructure Development Tax Credits

- (a) Where the Mining Company has, in any Tax Year, incurred expenditure in the construction of an approved Infrastructure Development Scheme approved pursuant to Clause 6.10 (b), the amount of such expenditure not exceeding SI \$ 200,000 per annum (indexed to the Solomon Islands Consumer Price Index from the base year of 1996) shall be allowed to the Mining Company as a tax credit against the income tax due and payable under the Income Tax Act by the Mining Company in respect of that Tax Year provided that:
 - (i) no other allowance, deduction or tax credit under this Agreement or the Applicable Law shall be given to the Mining Company in respect of such expenditure in that or any other Tax Year; and
 - (ii) the tax credit for any Tax Year shall not exceed the amount of income tax payable for that Tax Year; and

provided further that, in relation to any Tax Year during the period beginning from the date of commencement of production to the Tax Year when the Mining Company begins to pay income tax, such expenditure not exceeding SI\$ 50,000 per annum (indexed to the Solomon Islands Consumer Price Index from the base year of 1996) shall be allowed to the Mining Company as a tax credit against the income tax due and payable under the Income Tax Act by the Mining Company in respect of that Tax Year and the tax credit in respect of such Tax Year may be carried forward to the immediately succeeding Tax Year:

- (b) The Mining Company shall not less than four months prior to a Tax Year submit its proposals for any Infrastructure Development Scheme to the Government with such detailed particulars as required by the Government and apply for the prior written approval of the Government and the Provincial Government to such scheme. The

Government and the Provincial Government shall notify the Mining Company of its decision on the application within sixty days of the date of the application.

- (c) For the purposes of this Clause "Infrastructure Development Scheme" means a scheme for the development of such infrastructure (other than infrastructure relating to or required by the Project) and in such locality or area in Solomon Islands as approved by the Government.

6.11 Undertaking

- (a) The Minister shall use his best efforts to cause to be introduced into, and passed by the Parliament as soon as practicable the appropriate legislation, necessary to enable the implementation of this Agreement.
- (b) The Government undertakes that it will not declare any part of the Prospecting Area or the Mining Area a national park under the National Parks Act Cap. 34 or a State forest reserve under the Forests and Timber Utilisation Act Cap. 90.

6.12 Certification of Laws

Upon request by the Mining Company and, subject to payment of the appropriate administrative fee for such service, the Government shall, if it is appropriate to do so, certify a copy of a statute submitted by the Mining Company to be a true copy of the relevant statute of Solomon Islands.

7. DEBT-EQUITY RATIO, RECORDS, STATEMENTS AND AUDIT

7.1 Debt-Equity Ratio

The ratio of loan capital to paid-up equity capital shall be at all times not more than 9:1. All loan capital shall be procured by Ross Solomon Islands on behalf of the Mining Company on such terms and conditions as approved by the Central Bank of Solomon Islands, which approval shall not be unreasonably withheld, and in accordance with Applicable Law relating to the borrowing of foreign exchange by companies resident in Solomon Islands. The definitions of loan capital and equity capital shall be as specified in the approved financing plan set out in the application for the Mining Lease.

7.2 Books, Records and Information

- (a) Ross Solomon Islands and the Mining Company shall keep in Solomon Islands complete financial and technical books and records of all their Project Operations under the Gold Ridge SPL, the Mining Lease and this Agreement, including those relating to all revenues, expenditures, mineral production, shipment, sales or use of mineral production and products connected with and arising from such operations. The Government, its inspectors, officers, consultants and agents at any reasonable time and upon reasonable notice shall have access to examine, take extracts from, and make copies of, all such books and records and all documents relating to such operations.

- (b) Ross Solomon Islands and the Mining Company shall supply such information, reports, returns and statements at such times and in such forms as may be reasonably required by the Government or as required by the Applicable Law.

7.3 Responsibility for Maintaining Accounts

- (a) The Mining Company shall be responsible for maintaining all accounting records in order to comply with all legal requirements and to support all fiscal returns or any other accounting reports required by any governmental authority in relation to the Project.
- (b) The Mining Company shall maintain the accounts of the Project Operations in such a manner so as to fulfil its obligations under this Agreement.

7.4 Units of account and exchange rates

- (a) Accounts shall be maintained in the currency of Solomon Islands and Australia.
- (b) It is the intention of the parties that neither the Government nor the Mining Company should experience an exchange gain or loss at the expense of or to the benefit of the other. However, should there be any gain or loss from exchange of currency, it will be credited or charged to the accounts.
- (c) Amounts received and expenditures made in Solomon Islands Dollars or in Australian Dollars shall be converted from Solomon Islands Dollars into Australian Dollars or from Australian Dollars into Solomon Islands Dollars on the basis of the monthly average of the mean of the daily official buying and selling exchange rates between the currencies in question as published by the Central Bank of Solomon Islands for the month in which the relevant transaction occurred.
- (d) Amounts received and expenditures made in currencies other than Australian or Solomon Islands Dollars shall be converted into Australian or Solomon Islands Dollars on the basis of the monthly average of the mean of the daily buying and selling exchange rates between the currencies in question as published by the Central Bank of Solomon Islands or, failing such publication, as published in the Financial Times (London edition) for the month in which the relevant transaction occurred.
- (e) The average monthly exchange rates calculated in accordance with paragraphs (c) and (d) shall be identified in the relevant accounting records or statements.

7.5 Payments

- (a) Except as otherwise provided in this Agreement all sums due under this Agreement by a party thereto to another party shall be paid within 30 days following the end of the month in which the obligation to make such payment occurs and shall be paid through a bank designated by the respective party in any convertible currency acceptable to the other party.

- (b) All sums due by the Mining Company to the Government under this Agreement during any quarter shall for each day during which such sums are overdue during such quarter, bear interest compounded daily at an annual rate equal to ten (10) per cent or such other rate as provided for in the Income Tax Act as penalty for late payment of income tax.

7.6 Audit and Inspection Rights of Government

- (a) The Government shall have the right -
 - (i) to audit the Mining Company's accounts and records maintained under this Agreement with respect to each calendar year within two years (or such longer period as may be required in exceptional circumstances) from the end of each such year; and
 - (ii) to retain an auditor to undertake or assist with the audit.

Notice of any exception to the Mining Company's accounts for any calendar year shall be submitted to the Mining Company within six months of the receipt by the Minister of the report of its auditors. For the purposes of auditing, the Minister may examine and verify at reasonable times all charges and credits relating to the Project Operations and all books of account, accounting entries, material records and inventories, vouchers, payrolls, invoices and any other documents, correspondence and records considered by the Minister to be necessary to audit and verify the charges and credits. Furthermore, the auditors shall have the right in connection with such audit to visit and inspect at reasonable times all sites, plants, facilities, warehouses and offices of the Mining Company directly or indirectly serving its activities under this Agreement and to visit personnel associated with those activities.

- (b) The Mining Company shall answer any notice of exception under paragraph (a) within sixty days of the receipt of such notice. Where the Mining Company has after the said sixty day period failed to answer a notice of exception made by the Minister, the Minister's exception shall prevail, until such time as the Minister's exception is resolved.
- (c) Without prejudice to the finality of matters as described in paragraph (a), all documents referred to in that paragraph shall be maintained and made available for inspection by the Minister for seven years following their date of issue.

7.7 Records and Valuation of Assets

- (a) The Mining Company shall keep and maintain detailed records of assets in use for or in connection with Project Operations in accordance with normal accounting practices in exploration and mining activities of the international mining industry.
- (b) The Mining Company shall, by notice in writing addressed and delivered to the Minister at six monthly intervals, submit particulars to the Minister of all assets

acquired by the Mining Company to be used for or in connection with Project Operations during the period immediately preceding the delivery of such notice.

- (c) The Mining Company shall:
 - (i) not less than once every twelve months with respect to movable assets; and
 - (ii) not less than once every three years with respect to fixed assets, take an inventory of the assets used for or in connection with Project Operations and submit such inventory to the Minister together with a written statement of the principles upon which valuation of the assets mentioned in such inventory has been based.
- (d) The Mining Company shall give the Minister at least 30 days notice in writing addressed and delivered to the Minister of its intention to take the inventory referred to in paragraph (c) and the Minister shall have the right to be represented when such inventory is taken.
- (e) The Mining Company shall provide the Government with a comprehensive list of all relevant assets when requested by the Minister to do so. It is envisaged by the parties that, in the absence of special circumstances so warranting, the Mining Company will not be required to provide such list more than twice annually.

8. GOODS AND SERVICES

8.1 Local Preference

In the conduct of its operations under this Agreement, Ross Solomon Islands and the Mining Company shall give preference to materials and products produced in Solomon Islands, if such materials and products are not less favourable to Ross Solomon Islands or the Mining Company in terms of price, quality and availability at the time and in the quantities required. Price comparisons shall be made on a delivered and installed basis, and customs and other duties, taxes and charges on imports shall be taken into account, notwithstanding any exemptions or reductions with respect thereto pursuant to this Agreement.

8.2 Importation

Subject to the provisions of this Agreement, Ross Solomon Islands, the Mining Company and their contractors may acquire, import into, move within the country, export from the country, and use materials, plant, machinery, equipment, vehicles, explosives, fuels, reagents and supplies required for the Project. In acquiring, importing into, moving within the country, exporting from the country and using such items, Ross Solomon Islands and the Mining Company shall comply with Applicable Law.

9. EMPLOYMENT AND TRAINING OF SOLOMON ISLANDS CITIZENS

- 9.1 Subject to Clause 3.5, the Mining Company shall employ and train citizens of Solomon Islands in the Project in accordance with the program for the employment and training of Solomon Islands citizens approved by Government in the Feasibility Study and annexed to the Mining Lease. The Mining Company shall submit an annual report to the Government on the program. The terms and conditions of employment shall be in accordance with Applicable Law. The Mining Company shall employ and train the agreed number of landowners in accordance with the agreement between the Mining Company and the landowners.

10. ENVIRONMENT AND COMPENSATION FOR DAMAGE

10.1 Environmental Programme

Subject to Clause 3.5, the Mining Company shall construct and operate the Project and carry out operations hereunder in accordance with the environmental, reclamation and rehabilitation programme annexed to the Mining Lease. The Mining Company shall promptly take measures required by the aforesaid environmental programme, Applicable Law and good international mining practice to minimise and control and take all necessary measures to prevent any damage to air, land, water, persons, vegetation, marine or animal life from Project Operations in accordance with the environmental programme and clean up any damaging discharge and pay compensation as required by Applicable Law.

10.2 Environmental Bond

The Mining Company shall enter into a bond, satisfactory to and, with the Government for the due performance of its obligations under Clause 10.1. The amount of the bond shall as specified in the approved Feasibility Study.

11. FINANCING THE PROJECT

11.1 Financing Plan

Ross Mining on behalf of the Mining Company shall arrange for the financing of the Project and submit the proposed financing plan for the Minister's approval. Approval by the Minister of the proposed financing plan shall not be unreasonably withheld or delayed. Any issue or disagreement between the parties relating to or arising from the proposed financing plan or, refusal of the Minister's approval thereto, shall be referred to an independent sole expert competent on the subject matter to be appointed by agreement between the parties and, failing such agreement by the President of the International Chamber of Commerce in Paris and the decision of such expert shall be binding on the parties.

11.2 No obligation of Government

The Government shall not be obligated to provide any funds or credits, issue guarantees or otherwise become liable directly or indirectly for any financing of the Project.

11.3 Lenders' Requirements

The financing plan may include proposals, satisfactory to Government, to meet the reasonable requirements of lenders of the Project for securing loans for the Project by:

- (a) a first fixed charge over the Mining Lease and other fixed Project assets and equipment and a floating charge over all other assets of the Mining Company;
- (b) a registered mortgage of the Mining Lease and of the Mining Company's shares;
- (c) establishment of offshore foreign currency accounts, including a debt service reserve account charged in favour of the lenders;
- (d) an assignment by way of charge in favour of the lenders of the Project contracts, including the mine construction contract and the refining and sales agreement, and an assignment of the proceeds of an offshore mineral sales proceeds account or of future mineral production from the Project, as appropriate;
- (e) giving the lenders step-in rights to acquire or take an assignment of the Mining Lease on breach by the Mining Company; and
- (f) other security arrangements reasonably required by the lenders;

provided that the aforesaid charges, encumbrances and arrangements shall not in any manner adversely affect any payments due by the Mining Company to the Government under this Agreement or the Applicable Law.

11.4 Facilitation by Government

The Government shall facilitate the financing arrangements set out in the approved financing plan by the grant of requisite approvals to the creation, registration and assignment of the securities referred to in Clause 11.3.

12. FAIR AND ECONOMICAL PROJECT OPERATION

12.1 Non-Discrimination

- (a) The Government shall not discriminate against Ross Mining, Ross Solomon Islands, the Mining Company, their contractors and agents, directors, officers, employees or their dependents, in the application and administration of Applicable Law including, without limitation, the regulation of foreign currency exchange.
- (b) The Government shall expeditiously process applications for required permits, if any, for contractors and agents, directors, officers or employees of Ross Solomon Islands and the Mining Company and their dependents to enter, reside and work in and depart from Solomon Islands, where such personnel are required in the interests of the efficient and economic development and operation of the Project. Ross Solomon

Islands and the Mining Company shall periodically submit lists of personnel for whom such permits are required and the Government shall expeditiously grant the requisite permits enabling the persons concerned to enter and reside and work in Solomon Islands for periods of six months under each permit in accordance with the procedures agreed with the Government and reflected in a memorandum of understanding to be entered into by the parties.

12.2 Non-Cancellation

- (a) The Government shall not cancel or terminate this Agreement, the Special Prospecting Licence or the Mining Lease, except in accordance with the provisions of Clause 19.2.
- (b) The Government shall not cancel any other licence, lease, consent or approval necessary for the Project except in accordance with its terms or in accordance with Applicable Law. In the event of any cancellation contrary to Clause 12.2(b), Ross Solomon Islands and the Mining Company shall have the right to immediately re-apply for any such necessary licence, lease, consent or approval, which shall be authorised or granted if proper application is made in accordance with Applicable Law.

12.3 Non-Interference

The Government shall not involve itself in the management of the Mining Company or the day-to-day operation of Ross Solomon Islands or the Mining Company except as required by Applicable Law or as may be in accordance with this Agreement.

12.4 Non-Expropriation

The Government shall not expropriate, or commit an act in the nature of an expropriation of, any assets used by Ross Solomon Islands, the Mining Company, or an Affiliated Company, or their contractors, in their operations under this Agreement, the products resulting from such operations, the licences of the Mining Company, or any shares or interests of Ross Solomon Islands or the Mining Company, unless payment is made to such companies and contractors of reasonable compensation, within a reasonable period of time, having due regard to all the relevant circumstances. The amount of compensation shall be computed on the basis of the market value of the asset immediately before the impending expropriation became public knowledge. The compensation must be determined in accordance with internationally recognised principles of valuation and equitable principles and paid under section 8(1)(c)(i) of the Constitution of Solomon Islands. Such compensation shall be freely convertible and remittable.

12.5 Transfer of Funds and Maintenance of Foreign Bank Accounts

The Mining Company may retain, in a foreign currency account with a bank in Solomon Islands or in any offshore bank previously approved by the Central Bank of Solomon Islands, proceeds of its exports and any foreign loan or equity capital raising to meet its next six-months foreign currency requirements for supplies and services reasonably necessary for the Project in accordance with good international mining industry practice, and, subject to this Agreement, loan service charges, interest payments, loan repayments, dividends and amounts payable under other approved financing arrangements in accordance with the

approved financing plan. A schedule of such requirements shall be provided quarterly to the Central Bank. The balance of such proceeds shall be repatriated to Solomon Islands and converted into Solomon Islands currency at the then ruling rate of exchange.

12.6 Marketing

Subject to Clause 5.3, and the procedures for export and verification of gold production set out in or determined pursuant to the approved Feasibility Study, the Mining Company may freely sell and export dore, gold, silver and other minerals produced from the Mining Area in accordance with this Agreement.

12.7 Affiliated Company Transactions

Any transactions hereunder between the Mining Company and Ross Mining, Ross Solomon Islands or any other Affiliated Company, shall be on the basis of arm's length competitive third party international prices and such other terms and conditions as would be fair and reasonable had such transaction taken place between unaffiliated parties. Ross Solomon Islands and the Mining Company shall report to the Government in reasonable detail its transactions with Affiliated Companies within ninety (90) days after the end of each Tax Year.

12.8 Services, Know-how and Materials

Any services including provision of know-how and use of patents or licences, provided to the Mining Company by Ross Mining, Ross Solomon Islands or any other Affiliated Company, which is normally provided by a contractor in accordance with good international mining industry practice, shall be provided only on an actual cost reimbursable basis, which cost shall be fair and reasonable. Any material supplied by Ross Mining, Ross Solomon Islands or an Affiliated Company to the Project from its own stocks shall be priced at cost, but shall not in any event be higher than the then prevailing arm's length competitive international price for material of similar quality.

12.9 Currency of Accounts and Payments

All financial accounts of Ross Solomon Islands and the Mining Company shall be maintained in Solomon Islands dollars. All amounts due to the Government shall be calculated and be payable in Australian dollars or other freely convertible currency.

12.10 Indemnity

The Mining Company, Ross Solomon Islands and Ross Mining shall indemnify and keep indemnified the Government and the Government's officers, employees, agents and contractors, against all claims, actions, rights or demands for any loss, damage, cost, death or injury of any third party to the extent it arises out of or is in connection with any act or omission of Ross Solomon Islands, Ross Mining or the Mining Company, or their employees, agents and contractors, in the conduct of operations under this Agreement provided that the indemnity of Ross Mining shall not apply after the date when the Mining Company has repaid all its loans and other debt and has met all its obligations to the lenders under the financing arrangements referred to or set out in the approved financing plan relating to the

Project entered into by the Mining Company or on behalf of the Mining Company by Ross Mining, Ross Solomon Islands or any other person.

12.11 Tax Stability

- (a) In the event of changes in the Tax Law, or the fiscal impositions provided for in Clause 6.9 or new fiscal impositions in the nature of a tax on Ross Solomon Islands or the Mining Company, made by the Government, the Provincial Government or the Bolomona Area Council after the date of this Agreement, other than the changes provided for in this Agreement or, fiscal impositions that are applicable to the Mining Company at generally prevailing rates in force from time to time as provided for in this Agreement, significantly and adversely affect the financial benefits accruing to Ross Solomon Islands or the Mining Company, or to the Government, the parties shall promptly agree upon the appropriate adjustment in favour of the party so affected and a fair and reasonable method to make the adjustment in respect of such changes or new fiscal impositions. In the event the parties do not promptly agree, Ross Solomon Islands and the Mining Company may apply to the High Court of Solomons Islands for permission to offset and pay into an escrow account in Solomons Islands, monies otherwise payable to the Government, in amounts reasonably estimated to compensate for such changes until the parties do agree upon such adjustment and method. Any party may refer the matter in dispute to arbitration under Clause 20.
- (b) Notwithstanding the provisions of Clause 12.11(a), where, after the date of this Agreement, in respect of any fiscal imposition that is applicable to the Mining Company at generally prevailing rates in force from time to time as provided for in this Agreement, there is a Major Change as defined in Clause 12.11(c) to the generally prevailing rate thereof as at the date of this Agreement which significantly and adversely affects the financial benefits accruing to Ross Solomon Islands or the Mining Company, or to the Government, the parties shall promptly agree upon the appropriate adjustment in favour of the party so affected and a fair and reasonable method to make the adjustment in respect of such change. In the event the parties do not promptly agree, Ross Solomon Islands and the Mining Company may apply to the High Court of Solomons Islands for permission to offset and pay into an escrow account in Solomons Islands, monies otherwise payable to the Government, in amounts reasonably estimated to compensate for such change until the parties do agree upon such adjustment and method. Any party may refer the matter in dispute to arbitration under Clause 20.
- (c) For the purposes of Clause 12.11(b) "Major Change" in relation to the fiscal imposition means a change in the rate of the fiscal imposition as measured from the level of the rate prevailing on the date of this Agreement which exceeds the rate of change in the Solomon Islands Consumer Price Index from the year preceding the year in which the Major Change occurs to the year in which the Major Change occurs.

12.12 Ross Mining Guarantee

Ross Mining binds itself to procure fulfilment of all the financial and other obligations of Ross Solomon Islands and the Mining Company under this Agreement; and Ross Solomon Islands binds itself to procure the fulfilment of all the financial and other obligations of the Mining Company under this Agreement. Ross Mining shall provide a guarantee in the form set out in Annex B. The aforesaid guarantee by Ross Mining shall apply until the date when the Mining Company has repaid all its loans and other debt and has met all its obligations to the lenders under the financing arrangements referred to or set out in the approved financing plan relating to the Project entered into by the Mining Company or on behalf of the Mining Company by Ross Mining, Ross Solomon Islands or any other person, and the Government shall return the guarantee to Ross Mining within ninety (90) days after the date aforesaid provided all Ross Mining's obligations as guarantor have been duly discharged under the guarantee. Thereafter the performance of the obligations of the Mining Company under this Agreement shall be secured by a bond or bank guarantee acceptable to the Government entered into or obtained by the Mining Company for such amount as specified in the approved Feasibility Study.

12.13 Facilitation of Implementation of Agreement

- (a) The Government will endeavour to do all things necessary and practical to ensure that the Government and its public authorities facilitate the implementation of this Agreement.
- (b) The parties shall take the necessary measures and carry out the necessary actions to implement this Agreement.

12.14 Insurance

Ross Solomon Islands and the Mining Company shall effect and, at all times during the term of this Agreement, maintain for Project Operations hereunder insurance of such type and in such amount as is customary in the international gold industry in accordance with good international mining industry practice. The said insurance shall, without prejudice to the generality of the foregoing, cover loss or damage to all assets used in the Project Operations; pollution caused in the course of the Project Operations for which the Mining Company may be held responsible to the extent to which insurance cover for such risk is available to the Mining Company at reasonable cost; property loss or damage or bodily injury suffered by any third party in the course of Project Operations for which the Mining Company may be liable or the Mining Company may be liable to indemnify Government and the Mining Company's liability to its employees engaged in the Project Operations. The Mining Company shall require its sub-contractors to carry insurance of such type and in such amount as is customary in the international gold industry in accordance with good international mining industry practice.

13. ASSIGNMENT

- 13.1 Ross Mining, Ross Solomon Islands or the Mining Company may assign all or any part of their interests under this Agreement, and related rights under any lease, licence, consent or Government approval issued hereunder, (hereinafter called the "Related Rights") to any Affiliated Company. No such assignment to an Affiliated Company shall relieve the original assignor of its obligations under this Agreement or under the Related Rights. Ross Mining, Ross Solomon Islands, the Mining Company or any other Affiliated Company may assign all or any part of their interests under this Agreement and the Related Rights to any financially responsible third party which has adequate technical and financial resources to undertake operations under this Agreement, with the prior consent of the Government, which consent shall not be unreasonably withheld, provided that no assignment under this Clause shall take place until the Date of Commencement of Commercial Production other than as required by the lenders pursuant to the financing arrangements under the financing plan relating to the Project as approved by the Government pursuant to Clause 11.1. Ross Mining, Ross Solomon Islands and the Mining Company shall be released from their liabilities to the extent that they are assumed by such party. Any assignment or transfer of the Special Prospecting Licence or the Mining Lease, shall not be subject to any tax or charge by the Government.

14. MODIFICATION

- 14.1 The Special Prospecting Licence, the Mining Lease and this Agreement may not be modified except as provided in this Agreement, or in writing signed by all the parties.

15. CONFIDENTIALITY

- 15.1 Information
- Ross Mining, Ross Solomon Islands, the Mining Company, and the Government shall treat all technical and financial information concerning operations hereunder as confidential, with the exception of reports and studies relating to the environment and such other matters as the parties may jointly agree to publish. Subject to Clause 15.2, no party shall reveal such information to third parties, other than to its officers, employees, agents, consultants and contractors, except with the consent of the other parties, which consent shall not be unreasonably withheld, for a period of four (4) years from the date of transmission of such technical information, and in the case of financial information, until the expiration of this obligation as provided in Clause 15.3. Technical information concerning the Prospecting Area may only be revealed three (3) months after the expiry of the Special Prospecting Licence if no application is made for a Mining Lease. If the application is made, such information may only be revealed eighteen (18) months after the date of the application. The Government may nevertheless use and publish any such information in general and official statistical reports on minerals and mining in Solomon Islands and for or in connection with

the administration of the Mining Law, any legal proceedings, investigation or inquiry conducted thereunder or for any other purpose required under the Applicable Law.

15.2 Disclosure

Ross Mining, Ross Solomon Islands or the Mining Company may disclose any such information to an Affiliated Company, provided that such information shall be accorded similar confidential treatment by the Affiliated Company. Ross Mining, Ross Solomon Islands or the Mining Company may also disclose such information in connection with a bona fide proposed assignment. In no event shall the Government reveal any proprietary information owned by Ross Mining, Ross Solomon Islands or the Mining Company except to the extent such information enters the public domain or is revealed by a third party not under an obligation of confidentiality. A party hereto may reveal any confidential technical and financial information to the same extent. A party, or an Affiliated Company, may also reveal information when necessary in connection with any arbitration or legal proceedings, or as may otherwise be required by this Agreement, Applicable Law, the applicable law and regulations of any country having jurisdiction over such party, or the rules of any stock exchange on which the party's or an Affiliated Company's shares are traded or to any professional advisers for the purpose of advising a party on any matter concerning the Project.

15.3 Press Release

Subject to Clause 15, no party may quote the other party's or parties' views in any press release without prior written consent of the other party or parties concerned.

15.4 Expiration of Obligations

The parties' obligations under this Clause shall expire at the final completion of Project Operations or the termination of this Agreement, whichever first occurs.

16. FORCE MAJEURE

16.1 Events and Conditions

The parties hereto shall not be liable under this Agreement for a delay or failure to perform an obligation due to any event or condition of force majeure. A party shall be excused by force majeure only to the extent the party claiming force majeure could not reasonably have been expected to foresee and prevent or control the same, and, where the party claiming force majeure is the Mining Company, Ross Solomon Island or Ross Mining provided that the event or condition was not caused by the failure by the Mining Company, Ross Solomon Islands or Ross Mining respectively to observe good international mining industry practice. For the purposes of this Agreement force majeure means war, insurrection, civil disturbance, blockade, riot, embargo, strike or other labour dispute, land dispute including dispute concerning compensation for access to land, epidemic, earthquake, volcano, storm, flood or other severe adverse weather condition, explosion, fire, lightning, breakdown of machinery or facilities, shortage of labour, transportation, fuel, power or essential plant, equipment or materials, or any other unforeseeable, unpreventable or uncontrollable event

or condition. An unreasonable delay or failure exceeding three months or such longer period as may be reasonable in the circumstances by Government or, as the case may be, Provincial Government or Local Government in the issuance or grant of an Ancillary Authorisation required for the implementation of the Project, shall, to the extent that it prevents Ross Solomon Islands and the Mining Company from lawfully carrying out the Project activity concerned, in relation to that Project activity constitute force majeure to Ross Solomon Islands and the Mining Company provided a timely application in accordance and compliance with Applicable Law is properly made. A delay in the payment of money shall not be excused by force majeure.

16.2 Time Extensions

The party affected by force majeure shall be granted a time extension equal to the period for which performance was delayed by force majeure.

16.3 Reasonable Measures

The party claiming force majeure shall take all reasonable measures to remove its inability to perform and comply with the terms and conditions of this Agreement with a minimum of delay. No party shall be required to settle a labour dispute or a land dispute on terms which are not in good faith satisfactory to it.

16.4 Notice of Force Majeure

The affected party shall give notice to the other party of an event of force majeure as soon as possible, and similarly give notice of the restoration of normal conditions.

17. NOTICE

17.1 Notices

Any notice, application, request, consent, approval, direction or instruction, must be given in writing.

17.2 Service

It must be served on the party's authorised representatives as follows:

- (a) by hand between parties resident in the Solomon Islands; or
- (b) sent by facsimile transmission; or
- (c) if either method in (a) or (b) is not possible, sent by registered mail.

17.3 Delivery

The following addresses are the addresses for service and the following persons are the authorised representative of a party for the purposes of this Agreement. A party may change its address for service and its authorised representative by giving notice to each other party.

The Government: Ministry of Energy, Mines and Minerals
P. O. Box G37
Langakiki Ridge
Honiara, Solomon Islands
Facsimile: 677 25811
Authorised Representative: Permanent Secretary

Ross Solomon Islands: Ross Mining (Solomon Islands) Limited
Coopers & Lybrand
1st Floor, City Centre Building
Mendana Avenue
Honiara, Solomon Islands
Facsimile: 677 25872
Authorised Representative: Project Manager

Ross Mining: Level 3, 189 Coronation Drive
Milton, Queensland, 4064
Australia
Facsimile: 617 33691119
Authorised Representative: Managing Director

Gold Ridge Mining: Pakoe Road, East Gold Ridge
Kola Ridge
Honiara, Solomon Islands
Facsimile: 25872
Authorised Representative: Manager

18. NON-WAIVER

- 3.1 In the event a party shall waive any breach of this Agreement, such waiver shall be limited to the specific breach waived and shall not adversely affect or prejudice that party's right as to another breach, whether or not of the same nature.

19. SURRENDER AND TERMINATION

- 19.1 Surrender
Ross Mining, Ross Solomon Islands and the Mining Company may surrender their rights by written notice signed by their respective chairmen:
- (a) under this Agreement and the Prospecting Licence, upon ninety (90) days notice;

- (b) under this Agreement and the Mining Lease, anytime before the Date of Commencement of Commercial Production upon four (4) months notice; and
- (c) under this Agreement and the Mining Lease, after the Date of Commencement of Commercial Production upon six (6) months notice.

In the event of such surrender, Ross Mining, Ross Solomon Islands and the Mining Company shall be relieved of their obligations and liabilities under this Agreement, the Mining Lease or the Special Prospecting Licence, and such other leases, licences, permits, rights or approvals issued by the Government in connection therewith from the date of expiry of the notice, provided, however, that Ross Mining, Ross Solomon Islands and the Mining Company shall be and remain liable for all obligations accrued prior to the effective date of such surrender as provided in this Clause and those obligations which persist or are required to be fulfilled after termination, except for the Project completion and cost obligations specified in Clause 3.13(a).

19.2 Termination by the Government

The Government may, without prejudice to any other rights that the Government may have, terminate this Agreement, if any of the following events should occur:

- (a) Subject to the provisions of Clause 16 and the second proviso to Clause 3.13(b), the Date of Commencement of Commercial Production does not occur on or before the end of the sixth month following the sixth anniversary of the date of issuance of the Mining Lease and the requisite Ancillary Authorisations specified in the application for the Mining Lease whichever is the later;
- (b) Ross Mining, Ross Solomon Islands or the Mining Company commits a material breach of, or fails to comply with or observe, a fundamental provision of this Agreement, the Special Prospecting Licence, or the Mining Lease, and fails or neglects to remedy that breach or comply with or observe that provision within ninety (90) days, or such longer period as may be reasonable in the circumstances, after a notice from the Minister requiring that the breach be remedied or the provision be complied with or observed;
- (c) Ross Mining, Ross Solomon Islands or the Mining Company shall dissolve, liquidate, become insolvent, commit an act of bankruptcy, make an assignment for the benefit of creditors, petition or apply to any tribunal for the appointment of a trustee or receiver for itself, or commence any proceedings relating to itself under any law pertaining to bankruptcy, reorganisation, arrangement, insolvency or readjustment of debt, whether now or hereafter in effect, otherwise than for the purposes of corporate reorganisation of which the Mining Company has given a reasonable prior written notice to the Government;
- (d) Ross Mining shall become unable to perform its obligations under Clause 12.12 and does not (with the consent of the Government, which consent shall not be

unreasonably withheld) provide a financially responsible third party, acceptable to Government, which has adequate financial resources to assume such obligations, or

- (e) Ross Mining, Ross Solomon Islands or the Mining Company shall assign any interest under this Agreement prior to the Date of Commencement of Commercial Production other than as required by the lenders pursuant to the financing arrangements under the financing plan relating to the Project as approved by the Government pursuant to Clause 11.1.

19.3 Termination by Ross Solomon Islands and the Mining Company

Ross Solomon Islands and the Mining Company may terminate this Agreement, without prejudice to any other rights they may have, if the Government commits a material breach of a fundamental provision of this Agreement and fails or neglects to remedy that breach within ninety (90) days or such longer period as may be reasonable in the circumstances, after a notice from Ross Solomon Islands and the Mining Company requiring that the breach be remedied.

19.4 Assets on Surrender, Expiration or Termination

Upon the expiration or termination of this Agreement by the Government or the surrender of this Agreement by Ross Mining, Ross Solomon Islands and the Mining Company, the Government shall have the option to acquire any or all immovable property of the Mining Company without charge, and to acquire any or all movable property of the Mining Company, not otherwise required by the Mining Company for mining operations, at net depreciated book value for income tax purposes, or at fair market value, whichever is less. The Government shall have a period of sixty (60) days to exercise such option, after which the Mining Company shall be entitled to sell to third parties any property which the Government shall not have exercised its option to acquire. Any property not removed within a period of twelve (12) months from the date of expiration, surrender or termination, may then be acquired by the Government without charge. The Government may require the Mining Company, Ross Solomon Islands or Ross Mining to remove any property not acquired by the Government or otherwise comply with the programme referred to in Clause 19.7(b).

19.5 Books and Records

None of the books and records of the Mining Company may be removed from Solomon Islands upon the expiration, surrender or termination of this Agreement without the prior consent of the Minister. Ross Solomon Islands and Ross Mining shall have the right to obtain copies of the books and records of the Mining Company and to hold them outside Solomon Islands.

19.6 Effect of Surrender, Expiration or Termination

- (a) The expiration, surrender or termination of this Agreement shall automatically terminate the Special Prospecting Licence or the Mining Lease, whichever is then in force, and all Ancillary Authorisations and all rights arising thereunder.

- (b) The expiration, surrender or termination of this Agreement shall be without prejudice to any rights accruing to any party against any other party under this Agreement prior to such expiration, surrender or termination of this Agreement.

19.7 Post Surrender, Expiration or Termination Obligations

Upon the expiration, surrender or termination of this Agreement pursuant to Clause 19.2, Ross Mining, Ross Solomon Islands and the Mining Company shall:

- (a) make the Prospecting Area or the Mining Area safe to the reasonable satisfaction of the Minister so as to prevent injury to persons, livestock or other property;
- (b) comply with the environmental programme for the reclamation and rehabilitation of the Mining Area (annexed to the Mining Lease), subject to Clause 3.5; and
- (c) otherwise comply with Applicable Law;

provided that if the Government intends to carry out mining operations thereafter, it shall so notify the Mining Company, and the Mining Company shall not take any action inconsistent with such notice or adversely affecting such mining operations.

20. COOPERATION AND ARBITRATION

20.1 Cooperation

The parties intend to be bound to this Agreement and to comply therewith in good faith. The parties shall regularly inform and consult with each other on matters pertaining to the Project and shall cooperate and regularly meet to facilitate the progress of the Project and to resolve any disputes which may arise between them.

20.2 Arbitration

The parties shall use their best endeavours to settle amicably among themselves any dispute arising between them in connection with this Agreement. If any such dispute cannot be resolved by the parties, the parties consent to submit to the International Centre for the Settlement of Investment Disputes between States and Nationals of other States (hereinafter called "ICSID") in accordance with this Clause. The arbitration shall be conducted by an arbitration board composed of three (3) arbitrators appointed in accordance with this Clause and the ICSID Rules. Each party shall appoint an arbitrator and so advise the other party and these two arbitrators shall designate the third neutral arbitrator who shall chair the arbitration board. If the arbitrators nominated by the parties fail to agree on the third neutral arbitrator within thirty (30) days following the appointment of the latter of the two arbitrators, or if a party fails to appoint an arbitrator within thirty (30) days after the other party has duly designated its nominated arbitrator, such arbitrator shall, if the parties do not otherwise agree, be appointed in accordance with the ICSID Rules. The parties may mutually agree to arbitration by a single neutral arbitrator who shall be chosen in accordance with the ICSID Rules. If for any reason an arbitrator is unable to perform his functions, a

substitute shall be chosen in the same manner as the original arbitrator. Any arbitrator appointed pursuant to this Clause shall be a national of a country other than that of the parties and shall have no professional or business connection with the parties, or any Affiliate of the parties. Arbitration hearings shall be held in Honiara, or such other country other than Australia agreed by the parties and, failing agreement, the seat of the ICSID Centre. Other rules of procedure to be applied shall be agreed upon by the parties and where the parties are unable to agree, by the arbitrator(s). The rules of procedure including the evidential rules shall be designed to permit the comprehensive, fair, accurate and expeditious presentation and adjudication of the issues.

20.3 Dispute

The parties hereto hereby agree that, for the purpose of Clause 25(1) of the ICSID Convention, any dispute in relation to or arising out of this Agreement is a legal dispute arising directly out of an investment.

20.4 Nationality

For the purposes of Clause 25(2) of the ICSID Convention, it is hereby agreed that, although Ross Solomon Islands and the Mining Company are or will be nationals of Solomon Islands, they are controlled by a national or nationals of Australia and shall be treated as nationals of Australia for the purposes of the Convention.

20.5 Right Not Affected

It is hereby agreed that the rights of Ross Mining, Ross Solomon Islands or the Mining Company to refer a dispute to arbitration shall not be affected by the fact that Ross Mining, Ross Solomon Islands or the Mining Company has received full or partial compensation from any third party with respect to any loss or injury which is the object of the dispute; provided that the Government may require evidence that such third party agrees to the exercise of such right by Ross Mining, Ross Solomon Islands or the Mining Company.

20.6 Enforcement

The Government hereby irrevocably waives any claim to immunity in regard to any proceedings to enforce any arbitral award rendered by a tribunal constituted pursuant to this Agreement, including, without limitation, immunity from service of process, immunity from jurisdiction of any court, and immunity of any of its property from execution.

20.7 Costs

The costs of the sole expert appointed pursuant to this Agreement or, as the case may be, of the arbitration proceedings under Clause 20, shall be borne by the unsuccessful party.

20.8 Appointment of Sole Expert

Where any dispute or matter is referred to a sole expert for determination under this Agreement, the sole expert shall be agreed upon within thirty (30) days of notification of the dispute or matter and, failing agreement, shall be appointed by the President of International Chamber of Commerce in Paris as provided in the relevant provisions of this Agreement.

20.9 Survival

The right to arbitrate or determine disputes under this Clause 20 shall survive the termination or cancellation of this Agreement.

21. GOVERNING LAW

21.1 Governing Law

This Agreement shall be governed, construed and interpreted only in accordance with the law of Solomon Islands, including the statutory law, regulations and other instruments having the force of law, from time to time in force and such rules of international law as may be applicable.

21.2 Compensation

If any such law coming into force after the date of this Agreement would invalidate this Agreement, the Mining Company, Ross Mining and Ross Solomon Islands shall, notwithstanding the coming into force of such law, have the right to claim compensation pursuant to Clause 12.4 and Clause 20 as if the coming into force of such law were an act in the nature of an expropriation.

22. SEVERABILITY

22.1 If any of the provisions of this Agreement, including the annexes, is held invalid or unenforceable, such invalidity or unenforceability shall not affect the validity or enforceability of any other provisions of the Agreement, except those of which the invalidated or unenforceable provision comprises an integral part or is otherwise clearly inseparable therefrom. In the event any provision is held invalid or unenforceable, the parties shall agree on a valid or enforceable provision which shall be a reasonable substitute for such invalid or unenforceable provision in light of the tenor of this Agreement and, on so agreeing, shall incorporate such substitute provision in this Agreement.

23. ENTIRE AGREEMENT

23.1 This Agreement including the Gold Ridge SPL and the Mining Lease (when issued) and the annexes attached hereto and thereto shall constitute the entire Agreement between the parties.

IN WITNESS WHEREOF the parties hereto cause this Agreement to be entered into by the signatures of their duly authorised representatives in Honiara, Solomon Islands.

For the Government of Solomon Islands
by

Donza

Minister for Energy, Mines and Minerals

Witness *[Signature]*



For Ross Mining (Solomon Islands) Limited
with the prior approval of its Board of Directors
by

[Signature]
Authorised Representative

Witness *[Signature]*

For Ross Mining N.L.
with the prior approval of its Board of Directors
by

[Signature]
Managing Director

Witness *[Signature]*

For Gold Ridge Mining Limited with the
prior approval of its Board of Directors by

[Signature]
Managing Director

Witness *[Signature]*

PROSPECTING AREA



All that piece or parcel of land situated on the Island of Guadalcanal, containing thirty square kilometres (30 Km²) commencing at UTM grid co ordinates 621000/8943000 thence due East for five kilometres to grid 626000/8943000 thence due South for six kilometres to grid co ordinates 626000/8937000 thence due West for five kilometres to grid co ordinate 621000/8937000 thence due North to the point of commencement as outlined above.

SPECIAL PROSPECTING LICENCE 185, GOLD RIDGE
CENTRAL GUADALCANAL SOLOMON ISLANDS

PARENT FINANCIAL AND PERFORMANCE GUARANTEE
(to be furnished pursuant to Clause 12.12 of the Agreement)

WHEREAS Ross Mining NL a company duly organised and existing under the law of State of Queensland, Australia having its registered office at Level 3, 189 Coronation Drive, Milton, Queensland 4064, Australia (hereinafter referred to as 'the Guarantor' which expression shall include its successors and assigns) is the direct owner of 100% of the capital stock of Ross Mining (Solomon Islands) Limited, a company incorporated under the laws of Solomon Islands and having its principal place of business at Coopers and Lybrand, 1st Floor, City Centre Building, Mendana Avenue, Honiara, Solomon Islands (hereinafter Ross Solomon Islands) and WHEREAS Gold Ridge Mining Limited will, pursuant to the Gold Ridge Mining Agreement of even date of this guarantee entered into between the Government of Solomon Islands, Ross Mining (Solomon Islands) Limited, Ross Mining NL and Gold Ridge Mining Limited (referred to in this Annex as "the Agreement") be the Mining Company; and

WHEREAS the Guarantor wishes to guarantee the performance of Ross Solomon Islands and the Mining Company and their Affiliate Assignee under the Agreement as required by Clause 12.12 of the Agreement;

NOW, THEREFORE this Deed hereby provides as follows:

1. The Guarantor hereby unconditionally and irrevocably guarantees to the Government that it will up to the Relevant Date make available, or cause to be made available, to Ross Solomon Islands and the Mining Company and, any other directly or indirectly owned Affiliate of Ross Solomon Islands and the Mining Company to which any part or all of their rights and interests under the Agreement may subsequently be assigned (referred to in this Annex as Affiliate Assignee), financial, technical, managerial and other resources required to ensure that Ross Solomon Islands and the Mining Company and any Affiliate Assignee can carry out their obligations under the Agreement.
2. The Guarantor further unconditionally and irrevocably guarantees up to the Relevant Date to the Government the due and punctual compliance by Ross Solomon Islands and the Mining Company and any Affiliate Assignee, of any obligations of Ross Solomon Islands and the Mining Company and any Affiliate Assignee under the Agreement.
3. The Guarantor hereby undertakes up to the Relevant Date to the Government that if Ross Solomon Islands, the Mining Company, or any Affiliate Assignee up to the Relevant Date, shall, in any respect, fail to perform its obligations under the Agreement or commit any breach of such obligations, then the Guarantor shall fulfil or cause to be fulfilled the said obligations in place of Ross Solomon Islands, Mining Company or any Affiliate Assignee, and will indemnify the Government² against all losses, damages, costs, expenses or otherwise which may result directly from such failure to perform or breach up to the Relevant Date on the part of Ross Solomon Islands, the Mining Company or any Affiliate Assignee.

4. This guarantee shall take effect from the date of signature of the Agreement and shall remain in full force and effect up to the Relevant Date under the Agreement and thereafter until no sum remains payable by Ross Solomon Islands and the Mining Company, or any Affiliate Assignee under the Agreement or, as a result of any decision or award made by any arbitral tribunal or sole expert thereunder in respect of any matter arising under the Agreement, in relation to the period up to the Relevant Date. The Government shall return this guarantee to Ross Mining within ninety (90) days after the Relevant Date provided all the obligations of the Guarantor have been duly discharged hereunder.
5. This guarantee shall not be affected by any change in the Articles of Association and by-laws of Ross Solomon Islands, the Mining Company, any Affiliate Assignee or the Guarantor.
6. The liabilities of the Guarantor shall not be discharged or affected by (a) any time indulgence, waiver or consent given to Ross Solomon Islands, the Mining Company or any Affiliate Assignee; (b) any amendment to the Agreement or to any security or other guarantee or indemnity to which Ross Solomon Islands, the Mining Company or any Affiliate Assignee has agreed; (c) the enforcement or waiver of any terms of the Agreement or of any security, other guarantee or indemnity; or (d) the dissolution, amalgamation, reconstruction or reorganisation of Ross Solomon Islands, the Mining Company or any Affiliate Assignee.
7. In this guarantee, "Relevant Date" means the date when the Mining Company has repaid all its loans and other debt and has met all its obligations to the lenders under the financing arrangements referred to or set out in the approved financing plan relating to the Project entered into by the Mining Company or on behalf of the Mining Company by Ross Mining, Ross Solomon Islands or any other person.
8. This guarantee shall be governed by and construed in accordance with the laws of Solomon Islands.

IN WITNESS WHEREOF the Guarantor, through its duly authorised representatives, has caused seal to be duly affixed hereto and this guarantee to be duly executed the _____ day of _____ 1996.

The COMMON SEAL of ROSS MINING NL _____ was hereto duly affixed with the prior approval of its Board of Directors this _____ day of _____ 1996

in the presence of:

Director

Secretary

Illustrative Example of Additional Profits Tax

1. Under the Additional Profits Tax (APT) arrangements stipulated in Clause 6.3 of the Agreement, Gold Ridge Mining Limited (the Mining Company) is allowed to earn a twenty five percent (25%) rate of return (the "threshold" or "required" rate of return) before APT is levied at the rate of thirty percent (30%). As soon as the Mining Company has earned this threshold rate of return it will be charged APT on all further cash flow profits.
2. The point at which the Mining Company has earned this rate of return is calculated by taking the annual net cash receipts of the investor adjusting it for inflation as provided in Clause 6.3(c) of the Agreement and compounding this and continuing to do so as long as the cumulative cash receipts is negative.
3. For illustrative purposes only, an example of how APT is calculated without the inflation adjustment is given in the Table below. The numbers are not meant to represent the cashflow of the Mining Company, but are chosen to illustrate how APT works. In the example one tier of APT is paid at the rate of 30% on cashflow profits in excess of a twenty five percent (25%) rate of return.
4. The cumulative cash flow for the year in column (5) is simply the cumulative total from the previous year, multiplied by 1.25 in this example ($= 1 + 25\%$), and added to the net cash receipts figure in the current year from column (4). So, in year (2) the figure of -231 is arrived at by taking -105 from the previous year, multiplying it by 1.25, to give -131, and adding this to -100 in the current year to give -231.
5. The net profits, from year 4 onwards, finally outweigh the earlier negatives and in year 7, the cumulative cash flow becomes positive. This means that a twenty five percent (25%) rate of return has been earned by the Mining Company. APT is now paid on any further profits in the year in which they are earned. No further cumulative totalling for latter years is necessary unless the cash flow turns negative again (for example, because of further investment later in the mine's life); the negative cash flow would then be compounded by 25%, to allow that rate to be earned before APT is again paid.

US \$ MILLION

Year	(1) Capital and operating costs	(2) Tax, Royalty and other payments	(3) Mine Gross Revenue	(4) Net Cash Receipts (3)-(2)-(1) ["C"]	(5) Cumulative Cash Receipts compounded at 25% p.a. ["B"]	Accumul- -mulated NetCash Position ["A"]	APT at 30%
1	100	5	-	-105	-105	-	-
2	100	-	-	-100	-231	-	-
3	50	-	-	-50	-339	-	-
4	20	20	50	+10	-414	-	-
5	20	50	200	+130	-387	-	-
6	20	100	300	+180	-304	-	-
7	20	100	400	+280	+100	100	30
8	20	100	350	+230	-	230	69
9	20	80	300	+200	-	200	60
10	20	60	250	+170	-	170	51

- NB
1. Some numbers are rounded.
 2. The above cashflows will be adjusted by the inflation index specified in Clause 6.3 (c) of the Agreement.
 3. The columns above marked "C", "B" and "A" illustrate the computation of "C", "B" and "A" specified in Clause 6.3(b) of the Agreement.

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