TOWARDS PROSPERITY?
RURAL TRANSFORMATION IN POST-COLONIAL VANUATU

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ABSTRACT

This thesis examines the question of progress towards "prosperity" with particular reference to cash-generating activities of households in Nerenigman on Mota Lava in the Banks/Torres Local Government Region and the Longana area in East Ambae of the Ambae/Maewo Local Government Region. The assessment and comparison of post-colonial rural change in these areas is based on detailed anthropological research, and geographic and demographic theses published in the early 1980s by Rodman (1981) and Campbell (1985). These studies, together with results obtained from the 1979 population census, provide a baseline from which an examination of aspects of change in rural communities during the 1980s is conducted. The two areas were chosen as case studies to examine whether "balanced" rural development and prosperity had been achieved by the early 1990s.

Rural villagers' participation in cash-earning activities has meant that their subsistence mode of production has been modified and a path towards market-oriented farming established. Rural villagers in the study areas want development as measured in both tangible and intangible terms. In the study areas, this aspiration was evident through their participation in the capitalist economy. The presence of physical infrastructure such as schools, health centres, water supply systems and other capital assets villagers used for promoting development purposes, indicated their changing aspirations for Western-type consumer goods and services. In addition to the provision of the above services, the presence of commercial institutions such as co-operative stores, trade stores, commercial centres and banks were examples of facilities which were regarded as important for facilitating development. The villager's access to these services has paved the way for their deepening integration into the modern cash economy.

The evidence from this study suggests that opportunities for households to diversify and extend their sources of cash incomes on Mota Lava have been very limited since the independence of Vanuatu in 1980. There was little evidence that material living standards had improved much on the island. By comparison, the Longana area has shown evidence of increased levels of prosperity. There has been a significant change in the structure of the agricultural economy, from heavy dependence on copra in the 1980s to kava and livestock production which had become important sources of income by the early 1990s.

While cultural values remain important attributes of ni-Vanuatu assessments of prosperity, most villagers expressed a real desire to participate in the capitalist system and to share some of the material benefits of that participation in the early 1990s. This study of cash-generating activities of households in the study areas serves to underline the nature and direction of change, which increasingly involves the integration of rural villagers into a capitalist economy.

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CONVENTIONS

Spelling of place names

There is a great variety of island and place names. The names and spelling used in this text are those which appear to have received greater attention. The following table lists the spelling adopted in this thesis on the left hand with their equivalents on the right. In addition the town on Espiritu Santo is termed Luganville in the text and not Santo.

Villages on Mota Lava

Nerenigman	Gnerenigman, Ngerenigman
Totoglag	Tolag, Totlag
Qeremagnde	Kweyemagnde, Qeremagde
Var	Avar
Ra	Rah, Ara, Aya, Nitvono
Valuwa	Valua, Ablow

Villages in the Longana area

Lovindodo	Vuindodo
Logaituretovu	Lokaeturetovu
Lovatamalava	Lovatmalava
Ambaebulu	Ombambulu
Lovatmeamea	Lovatumemea

Abbreviations

AIDAB	Australian International Development Assistance Bureau
CDC	Commonwealth Development Corporation
DP1	First National Development Plan
DP2	Second National Development Plan
DP3	Third National Development Plan
EA	Enumeration Area
LGC	Local Government Council
NHCF	New Hebrides Cooperative Federation
NPEP	National Public Expenditure Plan
NPSO	National Planning and Statistics Office
ODA	Overseas Development Assistance
SCAF	Societe Cooperatif Administration Francais
SDU	Staff Development Unit
VCF	Vanuatu Co-operative Federation
VCMB	Vanuatu Commodities Board

Currencies

Prior to independence both the Australian Dollar and New Hebrides Franc (FNH) were legal tender in Vanuatu. Upon independence the New Hebrides Franc was renamed the Vatu (vt) which became the sole official currency and the use of the Australian currency was phased out. Unless otherwise stated all currencies given in the text are in Vatu. No attempt has been made to convert the currency into a common system or to adjust values for inflation. The exchange rates for Australian and New Zealand dollars since 1980 are shown below.

	Average exchange rate for 100 vatu	
	Australian ($)	New Zealand ($)
1980	1.326	1.486
1985	1.304	1.867
1990	1.087	1.429

Source: Government of Vanuatu, (1990:30)

CHAPTER ONE

INTRODUCTION

This study examines the experiences of rural development in two outer islands of the Republic of Vanuatu since the country's political independence in 1980. Attention is focused on cash-generating economic activities of rural households and the provision of infrastructure commonly associated with the notion of "development" in village communities. In the late 1970s villages in the Longana area of East Ambae and on Mota Lava were the subject, respectively, of detailed anthropological research by Rodman (1981) and geographic and demographic inquiry by Campbell (1985). These studies, together with results obtained from the 1979 population census, provide a base-line from which to examine aspects of change in rural communities during the 1980s. The studies by Rodman (1981) and Campbell (1985) provide an invaluable assessment of society and economy in these islands around the time of independence. The question as to whether or not subsequent changes have generated prosperity or under-development in these areas is the central concern of this thesis.

1.1 A research context

The transformation of subsistence villagers into market-oriented farmers has long been a major issue in debates concerning rural development. Both empirical research on and theoretical formulation about such a transformation have emphasised the importance of processes of change imposed from outside on both the village community and the individual farmer. The prevailing mode of resource allocation is altered as the subsistence-oriented production system is modified because of external influences and a path towards market-oriented farming is established (Sofer, 1987:1). The village communities included in this study have experienced rural change caused particularly by the island's integration into a wider capitalist economy. In the context of commercialisation of agricultural systems in the Pacific islands, Campbell (1985:12) points out that

> the old, relatively autonomous and integrated systems of several interdependent communities have broken down into several subsystems of the larger system. Linkages which formerly existed between islands have been reoriented so that all islands have ties with their national "centre" or capital but only secondary or intermittent linkages with each other.

Integration into the wider economy is accompanied by transformations in systems of agricultural production so that commodities produced by a family are not entirely for household consumption but also for sale to external markets. Furthermore, agricultural systems of rural households in Melanesia have not only been altered to meet the needs of the monetary economy but this change has also created tastes for Western type consumer goods.

Promotion of rural development initiatives in village communities is usually considered to be dependent on external pressures to mobilise resources which can be used to trigger change at a micro-level. Examples include the provision of capital, such as funds for meeting planned expenditure on new development initiatives, and transport infrastructure or networks linking various market centres which facilitate the movement of people, goods and services. The absence or lack of such "development infrastructure" in the isolated island communities of Melanesia is frequently seen to be inhibiting progress and the achievement of greater prosperity.

In this regard it is interesting to note that one of the most important objectives articulated in Vanuatu's first two National Development Plans is achievement of an "even" pattern of rural and regional development. The desire has been to encourage development away from the urban cores. A century of colonial domination resulted in physical infrastructure, commerce, and administration being heavily concentrated in the two urban areas of Port Vila on Efate and Luganville on Espiritu Santo. In the Preface to the Second National

Development Plan (DP2, 1987-1991) the Prime Minister, Father Walter Hayde Lini, stated:

> Our focus will increasingly be directed towards regional development and the training of men and women in skills necessary for the implementation of our development plan and the creation of an environment which will generate employment opportunities in the regions...We look forward to our future with confidence and with a development plan which will fulfill Vanuatu's special needs as a Melanesian nation in the Pacific and establish our unique path to development and greater prosperity (Republic of Vanuatu, 1989:i).

Crucial questions addressed in this study include the following. Have the benefits of development initiatives, clearly measured in visible terms, trickled down to the rural population? Have village people been able to benefit from development projects through access to employment opportunities or improved opportunities to earn cash income? What do villagers perceive the benefits of rural development to be? How has rural development between 1980 and 1991 affected household incomes? How have the main sources of income generated by households in the villages studied changed since independence?

The institutional context for rural and regional development planning in Vanuatu is eleven regions administered by Local Government Councils (LGC). These Councils have replaced the four administrative Districts of the colonial era. Local Government Councils are responsible for ensuring that the needs of communities, and particular resource and infrastructural conditions of different parts of the Republic, receive greater consideration in the process of subnational development planning. A framework for multilevel development planning has been established in Vanuatu which has parallels, in terms of objectives and expectations, with systems of decentralised administration in other parts of Melanesia. A critical question for the Republic's planners (and indeed, planners in other countries in Melanesia) is how effective such an institutional context has been for promoting the achievement of prosperity in the regions, especially when contemporary development theory tends to down-play policies of redistribution (including regional development) in favour of striving hard for aggregate economic growth. Development strategies which favour aggregate economic growth do not necessarily achieve "even" or balanced regional development.

1.1.1 Defining "prosperity"

It is appropriate now to define the terms "prosperity" and "rural transformation". There are a number of reasons for doing this. Firstly, it is important to appreciate that the meanings of these terms can only be understood in context. In this study the context is post-colonial change in rural villages in Melanesia. Secondly, the terms must take account of cultural values, the aspirations and the experiences of rural transformation among the inhabitants of village communities in Melanesia. An inside view of the rural people for whom development and change has become a "continuous" process is required in order to interpret "prosperity" and "rural transformation".

From the point of view of a rural Melanesian, prosperity is increasingly defined in terms of cash income and the presence of modern physical infrastructure. Other intangible aspects which are associated by rural villagers in Melanesia with a good quality of life such as spiritual development and living in social harmony within a community. In a Melanesian context, Brison (1991) examines the notion of "prosperity" in the context of social relations within the community, are also important. The idea of working together, living together in harmony with neighbours and abiding by customary rules and obligations generates power that brings good results and success to a community. A Melanesian community that "follows the rules" can achieve success in developing modern physical infrastructure. This is because effective implementation of any rural project is partially dependent on communal co-operation.

Melanesians also define communal and household prosperity on the basis of ownership of land for making gardens and forest resources which provide basic foods and other household requirements. Waiko (1985:14) captures this argument well when he states that natural resources found on customary land are a "vital capital resource" which contributes to the prosperity of Melanesian villagers. If these vital resources, around which rural villagers' daily lives revolve, are taken away, social harmony will be disrupted and communal prosperity is unlikely to be maintained.

While modern material goods and the presence of visible infrastructure are regarded by Melanesians as ingredients for "development" and evidence of prosperity, this is only part of a much more complex world view. The notion of "prosperity", defined in terms of both tangible and intangible elements in Melanesia, as in other cultural contexts, is considered to be vital for understanding the daily lives of rural villagers. As Hau'ofa (1980:485) has pointed out, Pacific islanders, in their aspirations for rural development, "aim not for a rise from poverty, which in general [they] do not have, but for a shift from one form of relative affluence to another".

In this study, "prosperity" is examined with particular reference to the form of relative affluence which Hau'ofa considers village-based Pacific islanders now wish to achieve. This affluence is associated with access to cash income and modern consumer goods in rural areas, as well as the provision of assets, amenities and utilities used by villagers to enhance their living standards. The introduction and adoption of various cash-generating economic activities, the re-organisation of land tenure systems to facilitate cash cropping, and rural development projects that create employment opportunities for rural households are dimensions of development that promote prosperity.

The income earned by households from cash-generating economic activities can be used to pay for consumer goods, small-scale investment opportunities, and amenities or utilities provided by the local, the regional and the national governments. Examples of the latter include water charges, health fees, school fees, council taxes, and trade store licenses. Relative poverty or deprivation is increasingly associated with absence of infrastructure, lack of opportunity to earn cash, infrequent contact with agricultural advisors and irregular shipping services that inhibit the potential for expansion and trade of local cash crops. Another obstacle, however, and one that can hinder the attainment of new forms of relative affluence in Melanesian villages, is ambivalent attitudes of rural dwellers towards change.

Access to land and other resources which can be used to generate cash income is not equal within rural communities. Attempts to shift from one form of relative affluence based on subsistence production to another based on production for sale have generated tension and widened inequalities within rural communities. Connell (1979) and Fahey (1986) provide useful reviews of inequality and class formation in Melanesian villages.

1.1.2 Measuring economic development and rural transformation

Holloway and Pandit (1992:57) argue that there is little agreement among contemporary scholars about how social and economic development is to be defined and measured. One group has proposed using measures of human welfare as alternatives to, or in conjunction with, conventional measures of economic development such as Gross National Product (GNP) per capita. Others have attempted to create composite development indicators that capture salient aspects of both of the economy and the well-being of the population. A third group has sought to examine factors other than GNP per capita that may affect social welfare, where factors such as income distribution, government spending patterns, and trade structure are associated with the level of human welfare.

It has been widely recognised that a major problem with the use of GNP is that it fails to incorporate non-marketed production and is biased by the prevailing market exchange rates. This argument is particularly relevant in the context of rural populations under study in this thesis. Crop production, both for subsistence and for sale, does not all enter proper marketing channels in order to give the full monetary value of goods and services produced by that household in a given year. It is in this context that Morrison (1992:1) argues

> there are still major gaps in our collective knowledge of what is meant by rural income (both monetary and non-monetary) - how it is generated and the connection between its various sources.

These observations are of particular significance in rural communities in Melanesia where a large proportion of residents continue to depend heavily on subsistence and cash crop production from their own agricultural units (Morrison, 1992). For example, about 82 percent of the population in Papua New Guinea still lived in rural villages in 1980 and 80 percent of Vanuatu's population were village-based in 1989. Even with movement of people to urban centres the numbers of people living in the rural areas will grow as a result of natural increase. The percentage of the total population in villages may decline with urbanisation but for the foreseeable future most Melanesians in Vanuatu, the Solomon Islands and Papua New Guinea will be village-based, deriving their livelihoods from use of the land.

Part of a development strategy in most developing countries is to introduce cash crops in areas where subsistence farming is predominant. It is also argued that there is a close correlation between cash crop production, new technology and the socio-economic transformation of small-scale farms, tending towards differentiation and individualisation (Morvaridi, 1990: 693). A driving force behind this change is the increasing intervention of the State in agriculture to promote commercialisation. In the case of Vanuatu, this strategy has had priority during the first decade of independence. The idea that new kinds of cash crops can be introduced in different parts of the archipelago underlies much of the thinking about rural development and the shift towards a more prosperous lifestyle in village communities.

The extent to which rural dwellers in Melanesia choose a mode of agricultural production that is appropriate for them, (small-scale or large-scale), is also dependent on the commitment of respective national governments in their attempts to diversify agriculture systems. The question of whether this change in mode of production is made to improve the daily lives of the ordinary villagers in terms of cash income, or is an attempt merely made to increase the export earnings of a country, also becomes important when other socio-economic costs are considered. The problems of customary land tenure systems, management skills, appropriate available technology, marketing arrangements and access to credit facilities are some of the factors which also affect rural dweller responses to encouragement to change their agricultural practices.

Rural transformation is to be understood in the context of a process whereby the productive activities of rural households shift progressively from a mode of production that is primarily subsistence oriented to one that is increasingly dominated by money. Rural transformation involves a move away from subsistence farming towards the modernised production of agricultural commodities for the market. In the recent past there has been a major debate in the literature on the Pacific about the nature of change in rural production. Ward and Proctor's (1980) case for a "plantation mode of production" and the counter-argument by Hardaker, Fleming and Harris (1984) and Watters (1984) give clear evidence of the range of views that surround this matter.

I argue that the ideas of "prosperity" and "rural transformation" cannot be studied in isolation from each other since these terms imply a change in the socio-economic and political institutions in which a rural peasant operates. This point is well captured by Sofer (1987:1) who makes a point to the effect that:

> The underlying idea of this transformation process is that of institutional change; a change which is stimulated by a societal effort to internalise the benefits of innovative activity in a way which will provide economic incentives for an increase in productivity.

1.2 Scope of study

As already noted, the primary objective of this study is to examine the development of cash-generating economic activities in Vanuatu during the 1980s and to assess their contribution to the achievement of a national development objective of "balanced" rural and regional growth. On the basis of field studies in Mota Lava and East Ambae, where some work into aspects of social and economic development had been carried out in the late 1970s, it became clear that strategies have been adopted by villagers to create "an environment which will generate employment opportunities in the regions" (Republic of Vanuatu, 1989:i).

The regional objectives contained in the first and second National Development Plans (DP1 and DP2) were examined in the context of demographic, economic and infrastructual changes in rural areas which have quite diverse prospects for generating employment opportunities for rural residents. The development of cash cropping and local business enterprises and the provision of service infrastructure provided a particular focus for field studies into the experience of rural change in regions where there are no major towns. A key variable underlying this experience is considered to be the transport system which links rural communities into the national and international economies. Without such integration, the potential for creating a diverse range of employment opportunities in rural areas is limited. Yet, the provision of transport services to populations scattered across and around numerous islands is expensive.

The role of public and private capital together with the interaction of national development projects and local community endeavours are explored in the context of tangible experiences in rural areas. This has relevance in the context of development planning in Vanuatu because DP1 and DP2 have articulated strategies designed to promote a more even distribution of the benefits of development across all eleven Local Government Regions in the country.

1.2.1 Relevance of study

An assessment in 1991 of the nature of post-colonial development in selected rural areas of Vanuatu was timely for three reasons. Firstly, the National Planning and Statistics Office (NPSO) was in the process of drafting the Third National Development Plan (DP3, 1992-1996). Information provided by the field studies contributed to an evaluation by NPSO of the nature of post-colonial development in selected rural areas. It has also assisted planners in evaluating strategies for rural and regional development in the 1990s - strategies based on experience with two national planning exercises in different parts of the Republic.

Secondly, the results of the 1989 population census are available for detailed analysis (Republic of Vanuatu, 1991). Information from the census, which is of relevance for development planning at local and regional levels, was extracted and used to complement data obtained in village surveys. Unfortunately local area data from the census could not be accessed in computer readable form to permit more extensive analysis of population movement and socio-economic characteristics of the population at the village level.

Thirdly, an important reason for choosing Vanuatu as the base for this research, was the desirability of developing a comparative Melanesian perspective on the common problem of creating opportunities in rural areas for Pacific peoples - a perspective that might ensure "that the fabric of [Melanesian] society is safeguarded from the adverse effects of a too rapid development process" (Republic of Vanuatu, 1989:i). By drawing on first hand experience of rural change and development in Papua New Guinea in the context of a decentralised administrative framework of Provincial Governments, I considered that I could make a contribution to the debate about subnational planning in Vanuatu. The wider comparative perspective has potential for furthering our understanding of processes which are transforming Melanesian societies in the post-colonial era.

1.2.2 Sources of information

A total of six months (end of April to end of October, 1991) was spent in Vanuatu collecting data. The first two months (beginning of May to end of June) were spent on Mota Lava, and the second two months (July and August) were spent in the Longana area of East Ambae. The balance of two months (September and October) was spent in Port Vila doing research in the National Planning and Statistics Office (NPSO) and the Cultural Centre in Port Vila. Some time was also spent in Luganville talking to families in the urban area who had come from the Banks islands.

The main source of information is a series of surveys which were carried out in the case study villages. These surveys, which are discussed in detail in Chapter Four, provide the socio-economic and demographic data at the household level which was required to analyse the cash economy of the villages. In addition, inventories of assets, amenities and utilities present on Mota Lava (including Ra as well) and in the Longana area were compiled, with dates of establishment, so that change in the village economies between the early 1980s and early 1991 could be assessed. Information was also derived from co-operative store records and small trade stores.

Information collected in the field in 1991 has been used to establish trends in socio-economic change in selected rural areas since the early 1980s. Participant observation was a useful technique employed to gain impressions by villagers themselves about post-colonial development experiences on Mota Lava and in the Longana area. Informal discussions with village elders helped to formulate perspectives on the notion of "prosperity" in a village setting. Informal interviews with the staff of relevant government departments involved in development planning or related policy decision-making processes at both the subnational and the national levels also assisted in this regard.

Recent statistical bulletins which relate to socio-economic development in Vanuatu were consulted, especially reports on copra production, trade, and prices published by the National Planning and Statistics Office (NPSO). The 1989 Census of Population and Dwellings, and various agricultural surveys conducted by the Department of Agriculture, Livestock and Horticulture (DALH), proved invaluable sources of information. Detailed examination of Vanuatu's First and Second National Development Plans (DP1 and DP2), which outline the government's development strategies and objectives, formed the basis for assessing subnational development planning in the 1980s and the early 1990s.

1.2.3 Organisation of the thesis

Following this brief introduction, which has outlined ideas relating to prosperity and rural transformation in a Melanesian village setting, Chapter Two evaluates development and rural change in Melanesia. Concepts of "development" and "rural development" are defined in the context of urban-industrialised countries and the perceptions of rural dwellers in Melanesia. Some reference is made to subnational development planning in Melanesia, and how this planning philosophy has become important in addressing development problems in Melanesia. In Chapter Three development planning and change in Vanuatu is examined in greater detail. This Chapter sets a scene for examining aspects of rural change and development during the early 1980s and in 1991.

Chapter Four outlines and evaluates the research methodology used to collect data for examining rural change in Vanuatu. Chapters Five and Six are devoted to analysing change between 1980 and 1991 in Mota Lava and east Ambae. Chapter Five focuses on production and the village economy while Chapter Six examines development infrastructure in the two case study areas. Chapter Seven, the conclusion, critically assesses the questions of progress towards prosperity, "balanced" regional development and rural development in Vanuatu. The field evidence is considered in the wider context of the debate about development in Melanesia, especially the views which Melanesians are articulating about the nature and direction of changes in their communities.

CHAPTER TWO

DEVELOPMENT AND RURAL CHANGE IN POST-COLONIAL MELANESIA: AN OVERVIEW

Two decades have passed since the achievement of political independence in Fiji in 1970, the first Melanesian country to attain this status. Independence was gained in Papua New Guinea in 1975, the Solomon Islands in 1978, and Vanuatu in 1980. The other Melanesian island group, New Caledonia, remains a colony of France. In addition Irian Jaya, which is inhabited by ethnic Melanesians, remains a province of the Republic of Indonesia. The transition from self-government to political independence in the first three Melanesian countries was relatively peaceful, while in Vanuatu, independence was achieved only "after a protracted, complicated, and ultimately violent struggle" (Jolly, 1992:330). The discussion of rural change in Melanesia in this Chapter is placed within the context of post-colonial experiences since 1970.

The concepts of "development" and "rural development" are examined with reference to a capitalist economy and a rural villager in Melanesia. Perceptions of "development" among rural dwellers are explored with a view to illustrating that definitions of what constitutes "development" vary quite markedly, depending on context. Aspects of the relevant rural Melanesian context are introduced with reference to land ownership and use, population movement and remittances, transport infrastructure and business endeavour and the emerging national and subnational planning policies and practices.

Rural development experiences and the expectations of the rural majority in post-colonial Melanesia need to be understood in the context of national policy objectives and how these policy objectives facilitate prosperity at household and community levels on the one hand, and at the level of administrative regions on the other. The goals of "people prosperity" and "place prosperity" (Agnew, 1984:35) have become important policy considerations in development projects funded by aid agencies in rural Melanesia. The advocates of this distinction usually argue that policies should help people, since aid to places or areas need not necessarily increase individual welfare. Benefits of policies directed to "places may accrue to the capitalists and landowners" (Agnew, 1984:35). This is certainly the case with regard to repatriation of profits obtained in the development of large mineral and forestry resources by multi-national companies in Papua New Guinea.

2.1 Development

Defining the term "development" is difficult (Cleary and Eaton, 1992:155). Ward (1990a:1) feels "that 'improvement' would be a better word for the generality" of the term. This is because "development" tends to refer to ways of improving human welfare in any cultural or societal context. Conventionally this improvement is associated with objectives designed to create conditions favourable for the sustained growth of capitalist economic activity. In the "development" literature, the term is also commonly associated with improvement in the quality of life of the majority of the population through better access to adequate housing and water supply, education and medical services, efficient transport networks and a range of commercial enterprises. In this regard Cleary and Eaton (1992:155) suggest that "development implies a range of infrastructural, educational, social and economic changes" which, in the view of increasing numbers of rural dwellers in Melanesia, must be visible and tangible before "development" can be said to have occurred.

2.1.1 Contextualising "development"

The philosophy behind development, either as a process or objective, is determined by a set of beliefs about the conditions of society. A point implied here is that the concept of "development" must be greatly expanded beyond economic growth, institutional modernisation and technical efficiency. Goulet (1987) suggests that a new way of defining and thinking about "development" is needed and that this should come from the communities who want development and who are affected by it. This is because no society is fully developed when it does not really meet the aspirations and the needs of members of its communities. In this context, Goulet (1987:170) points out that this different way of thinking about and defining "development should come from within the diverse value systems cherished by living communities". Thus development in rural Melanesia has to be contextualised as a process of change that is culturally acceptable, physically visible and economically viable.

Development frequently means different things to different people. For some, including many planners and economists, the concept is a synonym for economic growth measured by increases in per capita GDP. For others "the key criterion may be the quality of life, life expectancy [and] the level of human skills" (Ward, 1990a:1). The rationale for the use of "an accepted definition is not clearly articulated" (Holloway and Pandit, 1992:57). The use of per capita GDP or GNP is particularly useful in an attempt to measure development at a macro-level in urban-industrialised societies. In rural Melanesia, where subsistence agricultural activity is dominant, development may not necessarily be measured in this way. One reason for this is that GNP, for example, fails to incorporate some non-marketed production generated by the rural dwellers. This makes it particularly difficult to estimate income generation, especially how it is generated and the connection between various sources of income (Morrison, 1992).

Therefore, other factors affecting social welfare become useful indicators of "development" in rural Melanesia. For example, factors such as sources of cash incomes among different households and national and regional government investment in infrastructure help explain the experiences of development at a micro-level. Other more tangible experiences are the physical presence of various assets, amenities and utilities used by a household or a community. Examples include water supply systems, health centres and schools. The visible presence of these types of socio-economic infrastructure gives an indication of the level of prosperity achieved at a community level. Melanesians increasingly believe that access to these services is a measure of progress towards a better life style.

2.1.2 The concept of "rural development"

The need for rural development arises from the simple fact that more than half of the population in most of the less-developed countries still live in rural areas. In some Melanesian countries the proportion is much higher: as noted in Chapter One about 82 percent of the population in Papua New Guinea lived in the rural areas in 1980, while 80 percent lived in rural villages of Vanuatu in 1989.

The term "rural development" is ambiguous and does not have any strict or accepted definition. According to the World Bank, rural development

> is a strategy designed to improve the economic and social life of a specific group of people - the rural poor. It involves extending the benefits of development to the poorest among those who seek a livelihood in the rural area. The group includes small-scale farmers, tenants and the landless (World Bank, 1975:3, cited in Lea and Chaudhri, 1983:12).

Rural development in the 1980s is, therefore, a strategy which is welfare oriented and focuses particularly on the rural poor. However, the extent to which the above definition is applicable to the wider socio-economic context of rural people in Melanesia needs to be examined carefully. There is some ambiguity in identifying the "rural poor" and the "landless" in the strict sense of the terms in rural Melanesia. What is more significant is that there is unequal access to resources among the households and individual members of the community. Consequently, revenue generation opportunities for rural households derived from selling agricultural products, for example, are distributed unequally.

In the Melanesian context, identification of a truly "landless" class is difficult because access to land usually revolves around communal sharing. Thus, it is rarely the case that one encounters "landless" rural Melanesians because each individual member in a community gains access to land through membership of a group via either patrilineal or matrilineal descent lines (or both). Land in indigenous Melanesian societies is a communal commodity which encompasses different landuses and social relationships. A Mota Lavan scholar, and a priest in the Anglican church in the region, illustrated this relationship well when he stated that:

> It is understood that one group does not hold all rights to a particular piece of land. The principle was that each piece of land was a centre or focus with groups radiating out from it with varying degrees of connection with it (Lonsdale, 1987:52).

In this context, communal sharing and support is more commonly practised rather than being too individualistic, although this relationship is changing as people are assimilated into the capitalist system.

2.1.3 Views on rural development in Melanesia

Fisk (1971) argued that when people think of rural development, the term is defined in the context of raising output, increasing production and maximising money incomes. While he admits that there is some validity in this perception, he suggests that it is "a very gross simplification of reality" (Fisk, 1971:9), which cannot usefully be applied in the Melanesian context without qualification. Rural development is a set of policies with two main ends: the promotion of the well-being of the rural majority and the production of a surplus to meet national development requirements (Fisk, 1971:10). The term is wide, and Fisk's (1971:10) discussion includes economic issues such as

> what to produce, how much, how to produce it, questions of taxation policy and incentives, of savings, credit and investment, of specialisation versus diversity of production, of world markets and terms of trade,... questions of population, employment, wage and education policies, land tenure, local government, preservation of law and order, administration of justice, provision of roads and communications, health and medical facilities.

Rural development has become a focus of attention in post-colonial national development planning throughout Melanesia. As Lasaqa (1984:140) notes with regard to rural Fiji

> rural development is regarded as a series of integrated measures, aimed at improving the productive capacity and living standards of people who live outside the urban areas and who depend on the exploitation of the soil. This includes those people engaged in agriculture, forestry, fishing, and rural industries and handicrafts trade, commerce and services in the rural areas.

Improvements in productive capacity should facilitate rural prosperity and raise the living standards of the people. "Development" in rural communities of Melanesia is usually equated in visible terms with the provision of socio-economic infrastructure, such as airstrips, wharves, health centres, schools, roads, water supply systems and access to cash earning opportunities promoted by development projects - cash that can be used to purchase needed store items. Where there is an absence of infrastructure, the village people remark that no development has taken place in their island communities. Development then is not necessarily equated with economic criteria such as GNP, but the presence or absence of socio-economic infrastructure in rural communities becomes a useful indicator of place prosperity.

The perception of development held by the island communities in Melanesia in the 1990s has not changed much from the perceptions reported in the 1970s (Geddes et al., 1979:viii, and Bathgate et al., 1973:2). The villager's view of development has continued to be oriented towards tangible items associated with welfare improvement and development projects that generate income clearly measured as cash in the hand to buy European goods from the trade stores. The islanders need roads and, particularly, good shipping services to have access to social, economic and political infrastructure and opportunities which are dispersed over many small islands.

The extent to which aspirations for development by rural Melanesians were becoming a reality in the early 1990s depended, in part, on the type of rural/regional development policies and plans the national governments have pursued during the post-colonial era. Examination of post-colonial rural change and development in Melanesia in the 1980s is relevant for obtaining a comparative perspective on rural development in Vanuatu.

2.2 Rural change

In order to examine processes of rural change in post-colonial Melanesia, it is useful to set a base-line from which an investigation of changes can commence. This time reference establishes a period within which the pace and nature of rural transformation can be examined (Overton, 1989:120). In the rural communities of Melanesia, processes of rural transformation are not recent and go well back into the region's colonial history. As Toliman (1971:5) stated in the opening address to the Fifth Waigani Seminar on "Change and Development" in rural Melanesia:

> It is this prolonged contact that has brought our society into a state of transition, that has greatly altered the values and aspirations of the people - in fact, their whole way of life. This state of transition is a dynamic state, for change breeds further change...

This view is also well captured by Overton (1989:119) when he states that "change is seen as being rooted in the nature of colonial capitalism, the workings of the colonial and post-colonial states, and international capitalism". The issues of transformation processes and change in rural Melanesia, particularly with the evolution of cash economy, are evident in the debates about wage labour on plantations (see for example, Ward, 1990b) and issues that concern resettlement schemes and rural development projects. The role of taxation in stimulating wage labour in the early 1900s, the disappearance of intertribal warfare, mission influences and the gradual introduction of commercial relationships stimulated by manufactured commodities accompanied by settler colonialism were all significant in changing pre-colonial social relations of production in Melanesia (Connell, 1982:511).

These changes have continued to have an influence on social and economic structures in post-colonial Melanesia. Lacey (1982:351) argues that "any study of transformations and adaptations in the lives, economies, incomes, perceptions and values" of rural villagers in Papua New Guinea, needs to consider the "growth and expansion of both plantation and smallholder cash cropping". Any influences derived from these activities are then to be weighed against the expansion of fishing and mining activities, timber milling, trading and manufacturing activities of multinational corporations and growth of urban cores in which village migrants have found alternative sources of cash income. These activities have had a significant influence on the everyday lives of rural people in Melanesia.

Discussing rural change without a time reference cannot provide a perspective for a comparative analysis of the patterns and processes of rural transformation. What occurred in one geographical location during a specific time period is of significance and does help to explain the changes in economy, society and the environment in the other area (Overton, 1989:106). These types of change have been continuous in rural Melanesia and have been the result of the islander's integration into cash economic and resource development activities. Examples of such activities that brought dynamic changes into the rural communities of Melanesia abound, including: oil palm and rubber resettlement schemes in selected coastal areas of Papua New Guinea, forest resource developments in Papua New Guinea and the Solomon Islands, mineral resource developments in Papua New Guinea, copra production in Vanuatu and *galala*-based rural development projects on the island of Viti Levu. As Overton (1989:90) states, the movement of *galala* Fijians out of villages shows "a break with the past and a quest for modernity" when viewed from a perspective that traditionalism is an obstacle to development.

Within a particular time frame, Overton's (1989) study of rural change in five villages in Fiji provides a good example of case studies which focus on socio-economic changes that have taken place within village settings. The changes he observed are not recent but are a result of transformation processes that have taken place in the last two decades. The study's objective was to investigate patterns and processes of differentiation in rural Fiji. The findings have been related to a wider issue of rural change closely connected to the urban and international markets.

The study revealed that differences between the four major case study areas were greater than differences within the rural villages. In this context, Overton (1989:120) argues that this "empirical evidence cast doubt upon the efficacy of explanations which stress macro-level processes of change within Fijian communities". Things are happening at a village level, across all areas that are slowly transforming the lives of rural villagers (Overton, 1989). Another significant contribution is by Bayliss-Smith et al. (1988), where the primary concern of the study was to highlight spatial differentiation in the development experiences of residents living in outer or peripheral islands. A basic determinant of spatial differentiation in Fiji is location. Overton (1989:126-127) indicates that the core regions of the economy in Fiji are the main towns and the sugar regions:

> They are the most commercialized, the most prosperous and the most closely linked to the international economy. As one moves further from these areas towards the periphery, the costs of transport and production rise, commercialism and the intensity of economic activity decline, and living standards tend to fall. It is a model of distance decay, relative accessibility, and (for some) modernization. For the rural areas of Fiji, the model suggests that those regions closest to the towns will be relatively better-off with more profitable commercial agriculture (whether sugar or market gardening), closer proximity to wage employment and better access to services. Conversely, [in] the periphery agricultural options are more limited, wage labour is only through circular migration and/ or remittances, and services are poor.

This locational model has relevance outside of rural Fiji. It can be applied to the present spatial differentiation in Papua New Guinea, the Solomon Islands and the Republic of Vanuatu. Environmental factors such as climate, soils and land availability are also important determinants of the space economy of countries in Melanesia. The final factor is the historical component so that "the spatial economy of Fiji is a product of history, of the overlapping processes of indigenous economic inter-relations, land alienation, planter capitalism, urbanization and tourism" (Overton, 1989:127). However, all these factors are insufficient to explain and account for the spatial differentiation in Fiji. In this context Overton (1989:127) suggests that "capitalism, the state, class formation and tradition are all factors which require examination" as well.

2.2.1 Land and colonisation

Missionaries, traders and planters were usually the first groups of non-indigenous people to live in the Pacific islands. They settled into the rural communities, each pursuing different objectives. These objectives ranged from converting Melanesian souls to Christianity to the commercial development of land. Ravuvu's (1988) study of rural Fiji emphasises that Europeans attempted to introduce the idea of land rights. Planters acquired and laid claim to large areas of land which they did not use. They delimited their boundaries by making fences.

In Fiji, cotton, coconut and sugar cane plantations were established by Europeans who sought labour to work on them from the Solomon Islands, Vanuatu, Kiribati and Tuvalu. Local chiefs, however, did not want their "bonded" villagers to work on the plantations established by the settlers because of the fear of "conditions and possible far-reaching social changes imposed by the commercial labour system" (Ward, 1990b:274). This attitude was in a way an attempt to safeguard communal traditions by keeping Fijians from labour recruitment and indentured labour (Jolly, 1992:331). This resulted in what has been called "benevolent protectionism" in the British colony (Bain, 1988 cited in Ward, 1990b).

Rural development projects in Melanesia, such as cash-generating economic activities, and the development of service infrastructure (schools, health centres, airstrips, roads) also use land. In the case of rural Fiji, access to land and its use during the colonial era was strictly embedded in a neo-traditional land tenure system (France, 1979). A ni-Vanuatu has also commented, with reference to relationships between people and land in his own cultural context, that

> The colonialists were ignorant of Melanesian ideas and rules connected with land. The ties of tenure and kinship and the deep close relationship to the land are phenomena that no European legislation has ever managed to cope with (Lonsdale, 1987:52)

Divergent perceptions of the role of traditional land tenure systems in rural change and development in Melanesia, emerge in the extensive literature by foreign social scientists. Micro studies, based on field research in rural communities, have attempted to examine and assess changes brought about by the re-organisation of traditional land tenure systems. Overton's (1989) study in rural Fiji is one useful example in this context. Jolly's (1992) discussion of *kastom* and *vakavanua* ("the way of the land") in Vanuatu and Fiji respectively is also a useful study. She makes a significant contribution towards understanding *kastom* and *vakavanua* and identifies different articulations which have been derived, in part, from a "divergent experience of colonization and decolonization" in both countries (Jolly, 1992:330).

Rural Melanesians have strong cultural attachments to land. These close ties and relationships do pose certain problems in the way the land is used for "development" purposes. For example Lonsdale (1987:51), when discussing land issues in Vanuatu from a Melanesian perspective, states that land is not solely "viewed for economic and political meanings alone" but also embodies cultural sentiments. To use or sell land for material gains alone is to deprive one's own family and people of their security, pride and identity. The relationship between a rural dweller and land has emotional dimensions and is not only concerned with economic gain.

The rural dwellers on Santa Isabel in the Solomon Islands, for example, became more conscious of the value of their land when used for economic development purposes than they were in the past (Kile, 1981:5). A point implied here is that when land is used for large-scale resource development projects such as forestry, the economic benefits which accrue from this activity are unequally distributed. Rural dwellers argue that the State earns more, while the landowners receive less. This view is well captured in a statement by Kile when he points out that "they [the landowners] feel that the Province is doing things to increase its own wealth. This goes against custom" - custom which is strongly embedded in communal sharing and exchange of goods and items.

These strong views on land, and the potential they have for influencing directions of rural development and change in post-colonial Melanesia, have become very critical issues. This is because of the fact that a large proportion of land in Melanesia is held by customary landowners, and this can create conflict over land uses. Continual tribal tensions in selected rural areas of the Papua New Guinea highlands are partly attributed to land issues. Demands for compensation payments resulting from large-scale resource development projects, such as mineral resources, are another source of friction. Part of the reason is that the development of resources invariably involves a relocation, not only of rural population but of land use given competing demands for land (Hughes and Sullivan, 1985; 1986 and 1987).

2.2.2 Access to customary land

While traditional ownership of land can inhibit the potential for large-scale agricultural and resource development projects by interested companies, it does ensure a measure of prosperity for the household or the community which can use it. Jolly (1992:330) points out that the perpetuation of tradition in the context of land tenure systems in fact served capitalist development in some Melanesian countries. Studies which develop this view are covered elsewhere, such as Rodman (1987) for the Longana area in East Ambae in the Republic of Vanuatu, and Rutz (1987) in Fiji. Capitalist development not only stimulated the need for individuals and communities to participate in cash-generating economic activities but also encouraged the emergence of differentiation among the rural households village communities and the regions. This differentiation can be understood in the context of creating different scales of access by households and communities to advancement in material well-being and cash income opportunities: opportunities which accrue from capitalist development of traditional land.

Rural households in Melanesia make extensive use of their customary land to grow cash crops to sell in the domestic markets and for export overseas. Both tangible and intangible benefits can accrue from the development of customary land through cash cropping activities. In many rural areas of Melanesia, cash-cropping has transformed the everyday lives of the people. Lacey (1982) cites an excellent example of a villager in eastern Enga of the Papua New Guinea highlands. He obtained coffee seedlings from an extension officer, who happened to be his clansman, and planted them in his garden. This extension officer advised him to pick the seeds and sell them for money when the trees became mature. This he did. He received some cash from the sale of the coffee beans and spent the money on some consumer goods in the village. This person, like the villagers Brookfield (1968) described 15 years earlier, had found "the road to wealth" with trees. Other villagers in the area followed his example, and planting of coffee trees spread rapidly in the area. According to Lacey (1982:362), this person became a councillor in the 1970s and owned a trucking business and several trade stores. This particular example illustrates the idea of agricultural innovation, based on cash cropping activity, and integration into the monetary economy. Communities in Melanesia have long believed that this is a path towards achieving prosperity.

2.2.3 Use of the land

Cultivating the land has been at the core of Melanesian economies for centuries. The shift from subsistence production for local consumption towards production of a surplus for sale to traders and the international commodity market has been encouraged by government officials, especially since the 1950s. Major academic debates have developed over the most appropriate form of agricultural development for rural residents in the Pacific (see, for example, the exchange in 1984 between Ward, Hardaker, Fleming, Harris and Watters in *Pacific Viewpoint*).

Promotion of cash cropping has posed critical problems for Melanesian villagers. Competition for land, widening inequalities among villagers, declining subsistence yields (and associated with this, declining nutrition standards) have been reported in numerous case studies (see for example, Grossman, 1981). Yet, despite the problems, cash cropping is widely perceived by villagers and planners alike to be the most direct route towards raising rural incomes and material living standards. Development Plans throughout Melanesia emphasise the importance of agriculture, especially diversification of production, in the drive for greater prosperity in rural areas.

2.2.4 Mobility in Melanesia

Another commonly perceived road to prosperity is migration from rural areas to towns. There is an extensive literature on population movement in Melanesia, and it is not intended to review this here (see, for example, Chapman and Prothero, 1985, Connell, 1985 and Bedford, 1981, among others). This literature demonstrates clearly that motives for migration, and the resulting patterns of movement and population redistribution, cannot be explained simply in terms of differential opportunities for earning cash incomes. The search for wage employment is an important motive behind Melanesian migration, but it is by no means the main motive in many rural areas. There are many examples cited in the literature of movement triggered by natural disaster, tribal warfare, land shortages, lack of availability of education or medical facilities, and customary practices associated with marriage.

There is also considerable diversity in the nature of population movements. It has been shown in the extensive literature relating to Melanesia that migrants retain strong social and economic links with their villagers. A relocation of a place of residence can be permanent or temporary, depending on what Mitchell described as an interplay between "centrifugal and centripetal influences" (Mitchell, 1961:278, cited in Chapman and Prothero, 1985:1-2). These influences emanate from an interplay between, on the one hand, lack of potential for cash cropping or wage work in villages and employment opportunities in towns and, on the other, social obligations of migrants in the village and expanding economic wants and prestige systems in the urban cores. This interplay is significant when examining rural population changes and the effects migration which has on rural communities in Melanesia.

Population mobility in Melanesia results particularly from "real and perceived differences between places in life styles, economic opportunity, and the range of available services and facilities" (Bedford, 1985:333). In rural areas the reality of limited access to material goods and certain types of infrastructure has a significant impact on individual decisions to move. An important part of this decision is often the desire to obtain money and goods which can be remitted back to the rural community. Various kinds of material and monetary gifts, which are transferred to village communities by relatives working in the towns, become well entrenched in an established relationship between migrants and their "homes". However, as "absences become longer, the flow of wealth reverses and mobility is associated with their weakening" (Skeldon, 1990:216). The role of these remittances from the core, together with gifts that are sent by relatives from villages in the form of reciprocal exchange, is important in the context of rural economic change in post-colonial Melanesia.

2.2.5 Remittances

There is a major debate in the literature on migration in the Pacific about the role of remittances in rural development. Connell (1990) has reviewed much of the literature and while his rather pessimistic conclusion that remittances cause rural underdevelopment rather than development is contested (see, for example, Va'a, 1992 and Macpherson, 1992), there is little doubt that money remitted from towns to villages remains a significant dimension of contemporary rural change throughout the Pacific.

Brison (1991:460), using a Melanesian example developed by Carrier and Carrier (1989), refers to the way in which the "articulation" of the Ponam Island economy, through income remittances in the Manus Province of Papua New Guinea, has been integrated into a wider capitalist economy. Their study found that

> an elaborate system of intravillage exchanges allowed villagers to capture the money of the migrant workers. This is because the migrants are obliged to send home money to contribute to exchanges in order to maintain their standing as "good" people in the community, to accumulate social credit, and to retain their access to local resources they will need when they eventually retire and return to the island.

Through this "commodity exchange" (Carrier, 1992:193), social relationships are established between the donor and the recipients of remittances. This relationship operates in such a way that migrants in the urban cores remit money to the relatives in the village, "and in turn the villagers take care of the production of social identities and relations. Each group is dependent on the other, and, most important, migrants remain committed to village life and continue to send money home" (Brison, 1991:460). This illustrates an example of what Friesen (1992:207) referred to as "broad investment policy" through establishing reciprocal arrangements with fellow villagers back in the rural villages. These links to the rural dwellers and their own communities show that migration and remittances have been incorporated into the reciprocity system, a phenomenon well established in Melanesia.

The view that remittances provide capital to finance development projects in the destination areas has been argued strongly by Macpherson (1992:109). Connell (1985:140), among others, gives examples of small business enterprises that were financed by cash remittances. These included investing in cocoa planting, establishing a trade store or another kind of business enterprise, and paying brideprice. Other examples are given in village case studies in the outer islands in eastern Fiji. The injection of financial resources into Kabara's island economy from remittances by migrant workers provided a large part of the money required to pay for food imports to the island and to meet the cost of houses built of permanent materials (Bayliss-Smith et al., 1988). School fees for the children were also paid from this income. Lawrence (1985:550) notes that by far the largest part of cash income for a household in Tamana, southern Kiribati, was derived from remittances sent by kin in employment off the island. Examples from Vanuatu are cited by Bastin (1985) for Tanna and Campbell (1985) for Mota Lava. This issue is discussed further in Chapter Five.

2.3 Services and infrastructure

The development and expansion of cash-generating economic activities in rural communities depends on rural dwellers' access to various types of service and commercial infrastructure. Transport infrastructure, for example, stimulates economic development activities but is not in itself a sufficient pre-condition for rural prosperity. Commercial centres, co-operative societies and small business enterprises also contribute significantly towards facilitating rural change. Rural dwellers' access to, and ownership of, these services certainly promotes development of capitalist production, a form of production that invariably stimulates a need for basic material goods. The success or failure of these services is usually dependent on a combination of local demand and national subsidy. Their development requires a multi-faceted approach and the policy of integrated rural development programmes has become a priority in post-colonial Melanesia.

2.3.1 Transport infrastructure

An efficient transport infrastructure allows for the effective integration of the economies and populations of the outer islands into the rest of the national economy. Bayliss-Smith et al. (1988:139) have put it well when they state that "improved linkage with centres of development in Fiji is perceived by many residents to be one of the keys to a better quality of life in the periphery". This argument is not only relevant to the outer islands of eastern Fiji but is equally important in the context of islands in other Melanesian countries, such as Vanuatu.

While road transport is particularly useful for the movement of goods, services and people in island countries which have large land areas, such as Papua New Guinea, water transport plays a crucial role in the development process of countries which are archipelagic in nature. Integration through reliable shipping services into a wider regional and national economic system is vital for development in the outer islands. Poor transport infrastructure can hinder rural progress.

An overall improvement in accessibility of rural dwellers to a wider range of socio-economic opportunities and infrastructure through improved and reliable shipping services could contribute significantly to rural change. Realising the potential for expansion in the cash economy of rural dwellers depends in large part on transport to and from market centres. Good transport systems and communication networks invariably connect the peripheral locations with the urban cores. At the same time, these links also promote a sense of national unity in diversity. This is particularly important where national populations are dispersed over extensive areas of ocean. Unreliability or, indeed, the absence of a good transport service constrains the potential for rural prosperity in the context of cash-generating economic activities, such as export of copra and sales of various exotic foods, marine organisms and homemade handicrafts. These are the sorts of activities upon which rural dwellers depend for their cash income in the peripheral localities of post-colonial Melanesia.

The development of efficient transport networks in Melanesia is not only influenced by the archipelagic nature of many countries, but also by the nature of the physical geography. For instance, the development of shipping services is influenced by scarcity of good anchorage points, wide areas of reef and rough seas. On the other hand, the development of roads is inhibited by steep terrain, swamps, constant land slides and growth of vegetation (Brookfield with Hart, 1971:335). These factors, together with the fact that centres of commercial activity tend to be concentrated on one or two islands, mean that transport costs to outer islands residents tend to be high.

Bayliss-Smith et al. (1988) make reference to the effects of high freight rates on the cost of consumer goods in the eastern islands of Fiji. Rural villagers were paying higher costs for basic consumer goods from the trade stores in the outer islands than in the main towns. This was due to the fact that traders paid high internal freight rates, and these costs were passed on to the consumers. An example to this effect is cited where marine freight rates in the area increased by between 150 and 199 percent between 1972 and 1982 (Bayliss-Smith et al., 1988:107). One result is that it is difficult for rural producers to accumulate surplus income from the sale of produce for investment in cash-generating activities.

Air transport has become increasingly important in the movement of goods and people between the scattered islands. However, the main problem is that it is a very expensive service; freight rates and fares are high. The volume of goods moved is also small because most airstrips can only handle small aeroplanes. Air transport does enable emergency services to be provided in the outer islands and serves an important role in providing linkage with hospitals in the main centres.

2.3.2 Co-operative societies and rural change

Co-operative societies have served as an institutional network which facilitates exchange and marketing of agricultural and non-agricultural produce in rural Melanesia for more than three decades. The co-operative movement took root quickly in Melanesia after the Second World War, largely because of the tradition of communal enterprise in rural areas. There is an extensive literature on the role of co-operatives in Melanesian rural development (see for example, Grey, 1972, and McGee et al., 1980). After some initial successes in promoting agricultural development, investment in transport infrastructure, retail outlets and a wide range of village-based development initiatives, the co-operative movement has become less significant in rural development in recent years. Some reasons for this are given below, using examples drawn mainly from Papua New Guinea.

Grey (1972) discusses the role of co-operatives in coastal shipping in Papua New Guinea. The ships which were owned and operated by societies in the coastal areas of Papua New Guinea faced competition from other shipping operators. The price received for copra supplied by individual producers direct to the Copra Marketing Board (CMB) through these ships was much higher than that was paid by the village co-operatives. Thus the final result was that local producers opted to sell their copra direct to the Copra Marketing Board. This meant that the effect of co-operative shipping on the development of rural areas was minimal, partly because of the loss made by each ship.

The failure of these shipping services was due to: under-utilised cargo capacity; unpaid fares in the sense that executives of the associations used their services free without paying; uneconomic calls when every society was visited on every trip even if there was little cargo to load/unload. There were also high maintenance and operating costs and thus lost revenue while awaiting spare parts or repairs (Grey, 1972). All of these factors "aggravated the precarious financial situations of their major shareholders and proved [of] little or no benefit to the village people who [were] their ultimate owners" (Grey, 1972:429). Thus, the strategy to control capital through collection, accumulation and distribution by the co-operative societies did not produce lasting prosperity at a community level. Rather their lack of profitability led to frustrations among shareholders of the co-operative societies.

Other frequently cited reasons for the failure of societies in rural villages of Melanesia revolve around incompetent management and dishonest members and employees (Snowden, 1988:359). Brison (1991:346) cites an example of failure caused by social problems, such as lack of cooperation among fellow villagers and their leaders in the Kwanga society of Dreikikir region in Papua New Guinea. Rural dwellers argued that leaders "always pursued their own interest at the expense of their fellow villagers" (Brison, 1991:46). Prosperity of co-operative movements and the survival of small-scale business enterprises depend not only on economic accountability but also on communal cooperation and harmony in the rural areas of Melanesia.

Lack of control of capital is also a significant reason for failure. Continued credit to "reputable members of the community" such as teachers, health workers and co-operative inspectors has had an adverse impact on the long-term survival of many co-operatives. These outstanding informal loans were subsidised by the poorly paid copra producers of the society, a practice which did not bring prosperity to the society but only placed it in bankruptcy. Thus the producers were not receiving equitable returns from their investment. The society's objectives which focused on economic development and expansion often did not become a reality. There was thus little progress towards achieving rural prosperity.

2.3.3 Small-scale business enterprises (island trade stores)

Co-operative societies in Melanesia encouraged rural dwellers to participate in cash economic production but did not provide a vehicle for capital accumulation. The case studies by Grey (1972) for selected societies in Papua New Guinea, Connell (1978) for Siwai rural communities in the North Solomons Province and Bayliss-Smith et al. (1988) for Koro in the eastern islands of Fiji show that rural co-operative societies tended to operate within considerable financial and managerial constraints. For some the financial base was limited, particularly if revenue generation sources were limited only to one cash crop such as copra.

While they did not generate the cash returns expected, co-operatives did help to develop business skills in some parts of rural Melanesia. When members found that their capital was not used to their benefit, the option they often took was to cash in their share holdings and use the capital to start small-scale businesses of their own. In this case co-operative societies stimulated villagers to participate in running small-scale business enterprises such as trade stores, transport services, food processing (for example, bread) and handicraft production.

In Melanesia, small-scale business enterprises operated on an individual or a family basis seem to have had a greater chance of survival than business enterprises operated on a communal basis. During the 1980s small-scale business enterprises based on individual efforts became much more common. The opportunity to participate in establishing small business enterprises is seen to have the potential for improving the financial position of households.

2.3.4 The role of commercial institutions in rural development

Commercial institutions, such as banks, wholesale outlets, and clusters of retail enterprises in centres, increase opportunities for participation in small-scale business activity. One of the main problems that have inhibited the potential expansion of cash-generating activities has been lack of funds for investment by rural people in agricultural projects. Equally important is access to commercial centres which serve as distribution centres of consumer goods to potential rural entrepreneurs located in villages. For example, the continued operation and survival of trade stores in rural Melanesia depends on the supply of stock in the stores. Invariably, the commercial centres serve this purpose. Access to a major regional commercial centre by a rural entrepreneur reduces the hinterland penalty of isolation and high transport rates the trader pays for goods purchased from the urban cores.

The idea of regional commercial centres, which act as distribution and collection centres of various consumer goods for the rural people, can be contextualised as a "central place" that provides basic services to its rural hinterland. As Ward (1987:37) argues with reference to Fijian villages, "the traders provided links with export centres and the access to consumer goods which gave the means and motivation for greater involvement in the commercial world". In other words, commercial centres can stimulate new development initiatives among the rural population.

2.4 Subnational development planning

Development planning at various levels (national, regional and local) can be seen as an attempt to guide a multi-dimensional development process. Lefeber (1975) states that the function of regional planning is to provide a design for the distribution of resources within a region. Different national states have different welfare objectives which are subject to well defined constraints such as finance, human resource availability and resource endowments. Examples include the creation of employment opportunities that generate income at a local level and the provision of and access to socio-economic infrastructure which enable rural residents to improve their quality of life.

Conflicts of interest with respect to resource use and development between regional and national agencies can directly affect large sections of the total economy and the welfare of particular regions. A good example is the closure of the Bougainville copper mine in the North Solomons Province of Papua New Guinea. The Australian Financial Review (1992:10) cites a statement made by the then acting Foreign Minister in the Papua New Guinea National Parliament, Mr John Kaputin, in relation to the Bougainville crisis. He stated that

> [a]s we are all aware, the Bougainville people have gone through so much suffering and hurt and thousands of them have been deprived of the basic essentials such as health and educational facilities, shelter and food.

The negative effects which the local people now experience have not been entirely created by the actions of the landowners alone. The problem has come to the fore from a very complex political interplay between the central government and the North Solomons Provincial Government on the one hand, and the local landowners and the mining company on the other. The closure of the copper mine has certainly had a significant impact on the national economy in terms of internal revenue generation. A major negative effect of the continued conflict between the national government and the rebel movement on the island has been the lack of social service provision to the rural population.

Planning for development must consider the interests of diverse population groups. While the economic objective of a project may involve maximising profit and fostering an increase in revenue for the State, there needs to be consideration of the extent to which the project creates opportunities for rural dwellers as well. In this context, Taylor (1975:283) has argued that both the theory and the practice of regional planning and development are under-developed. The approaches currently used in the Third World have been derived essentially from experience in advanced capitalist economies. Their performance has been generally disappointing, with very little success in reducing regional income disparities or in achieving a trickle down of benefits to the majority of the rural population. These unsuccessful attempts have basically been the result of macro-level structural factors associated with the process of capitalist development in the developing countries. Local-level differences in socio-economic and political institutions established during the colonial and post-colonial period to facilitate development and rural change are also significantly important considerations.

The successful implementation of a planned development programme is dependent on local people's co-operation and knowledge regarding social organisations and other cultural traits which may impede development. In this context, Ward (1990a:4) has pointed out that "with subnational development, local knowledge is of crucial importance, though the need for it is often overlooked". Ganguli (1975:298) has also noted that popular participation, or the involvement of residents in any development project, will facilitate growth and promote prosperity for the people and for different geographic regions in the country. While the ultimate goal of any planned development is an improvement in the standard of living, the social values and perceptions of rural dwellers must be appraised and understood. This is because rural dwellers' habits and customs, and attitudes to change in their lifestyles, do partly contribute to the overall progress and achievement of economic programmes at a micro-level.

Most proponents of regional development argue for strategies which include equity, income creation, economic growth, employment creation and an improvement in the quality of life. There is a significant emphasis placed on the question of equity consideration within different spatial divisions and that of the society as a whole. Demas (1965:120) argues that in order to achieve such strategies, there is a need for functional change or structural change or both in different sectors of the society. He goes on to point out that a structural change may involve shifts in the distribution of labour force, creating linkages between different sectors of the economy or changing the direction of investment, while a functional change may require the creation of new types of markets and new incentives. However, this transformation process also depends on the socio-economic and political philosophy articulated by planners and politicians of a country.

2.4.1 Experiences of subnational development planning in post-colonial Melanesia

The island nations of the South Pacific, apart from Papua New Guinea, face special problems: they are among the smallest nations in the world. Some are spread over wide distances and remote from largest markets (Cole and Parry, 1986:4; and Connell, 1990) because of their archipelagic form and fragmentation of land area (Ward, 1990a:1). Sazanami and Newels (1990:3) also quote Corbin (1985) in relation to the following economic characteristics of these small island states which pose specific problems for their development

> overall smallness in size, varying degrees of internal fragmentation, small domestic market size, their dual, highly open and vulnerable economies, undeveloped or underdeveloped rural-urban linkages, high per capita costs in the provision of basic socio-economic infrastructure,... poverty of resources, internal and external communication problems.

Ward (1990a) shares this view and observes that there is relatively high internal transport cost between population concentrations. The urban hierarchy is fragmented and incomplete which thus poses some difficulty in the provision of basic services to the rural areas.

The experiences of rural change in Melanesia need to be understood in the context of overall development plans and policies adopted by governments during the 1970s and 1980s. As noted earlier, the time period from 1970 to the late 1980s is crucial in this discussion because most Melanesian countries gained their political independence during the 1970s. The regional development plans drawn up during this period give some indication of the priority areas of development defined by Melanesian planners and politicians and how these priorities were to be achieved at several levels.

The extent to which aspirations for improved welfare improvement and increased incomes have been fulfilled in Melanesia depends on the sort of development strategies the post-colonial governments have advocated and pursued. Ward (1990a), in examining the development plans of selected island countries, shows that subnational development, which in part emphasises welfare improvement of populations through "balanced" development, has certainly received much attention in the last decade. Fiji's Eight Development Plan (DP8, 1981-85), for example, aimed to achieve "a more geographically balanced pattern of economic and social development as well as to contribute to a more equitable pattern of income distribution" (Fiji, 1980:334 cited in Ward, 1990a:2). Similarly, the first two development plans for the Republic of Vanuatu (DP1, 1982-86; and DP2, 1987-91) have encouraged the achievement of an "even" pattern of rural/regional development. The Less Developed Areas Strategy embodied in the National Public Expenditure Plan (NPEP) of Papua New Guinea calls for an equal distribution of economic benefits, which includes income and services, among different areas (Crittenden and Lea, 1990:7). Similarly, the Solomon Islands Development Plan for 1980-84 sought to encourage rural service centres as a means of spreading development and stimulating rural improvement. At a subnational level, the Provincial Development Plan for the Western Province of the Solomon Islands also embodies a notion of an even spatial development within the different island groups of the Western Province (Western Provincal Development Plan, 1988-1992).

An objective which calls for "balanced" development and the "even" distribution of economic benefits, incomes and service provision among different areas of the country is very common in the plans for subnational development in Melanesia. Ward (1990a:2) correctly points out that subnational development planning in island countries "has not been an entirely forgotten dimension", although the "realities of achieving it" have become a crucial question in the early 1990s. The institutional arrangement for facilitating change and achieving the reality of the prescribed objectives of balanced spatial development are very important in this regard.

The desire to spread development benefits equally within and among different communities reflects a common objective of national governments to improve the welfare of their island populations. In addition the "spatial spread of development" (Ward, 1990a:1) raises an additional question about the effectiveness of planning carried out at both the subnational and the national levels. This is because what is perceived as a suitable development project at a national level by national planners is not necessarily a true reflection of, and is not necessarily compatible with, the village people's aspirations and development needs. The goals of the nation and of individual members of a community rarely coincide when it comes to decisions about rural development projects. This is one reason for failure of some projects implemented at a community level.

Post-colonial development planning in Melanesian countries has continued to emphasise, among other things, the need for raising rural incomes in order to improve the quality of life of the villagers, narrowing regional disparities, and reducing the movement of rural people to the urban cores. One example of a development strategy which emphasises rural development in post-colonial Melanesia is agricultural diversification. This would enable a greater variety of cash crops to be produced, thus reducing dependence on one export crop, copra.

Social problems have also become an area of concern for planners in Melanesia, as in other countries. Rapid population increase, migration to urban areas, unemployment, overseas migration of some of their most highly skilled people, and a shortage of labour for rural employment are frequently cited in Melanesian plans (Brookfield and Ward, 1988:15). The containment of social problems through the implementation of favourable development policies has become an important policy objective in some Melanesian countries during the 1990s.

2.4.2 Decentralisation

Planning for rural development in Melanesia has proved difficult because of very diverse local contexts. This has been certainly the case in Papua New Guinea, the Solomon Islands and the Republic of Vanuatu. In the light of this diversity, Sazanami and Newels (1990:5) argue that decentralisation is seen as a means to achieve objectives such as promoting rural prosperity. Decentralisation allows for greater local participation in the development process since the government is brought closer to the local communities.

Administrative decentralisation may not lead to reducing regional disparities; however it can actually widen them. For example, in Papua and New Guinea some provincial governments have done better in facilitating development within their own provinces because of strong political commitment at a provincial level while others have not done very well. The provincial governments of the North Solomons and East New Britain have done well because of their efficient provincial planning while the Western and Gulf Provinces have lagged behind. The resource base of North Solomons and the East New Britain Provinces to support subnational development planning are also well developed.

In Papua New Guinea pre-independence micro-nationalist and secessionist movements, such as on Bougainville in the early 1970s, encouraged the establishment of a decentralised system of administration (May, 1982). Similarly, in the Solomon Islands "breakaway" demands from selected regions of the country, such as the Western Division, also partly contributed to the introduction of their provincial government system in the early 1980s (Larmour, 1985:78). While demands for regional autonomy in Papua New Guinea and the Solomon Islands were "inspired and orchestrated by island groups who were economically and educationally more advanced" (Ghai, 1985:46), the situation in Vanuatu was different. Demands for regional autonomy in Vanuatu during late 1979 and the early 1980s came from a minority group. The main objective was "the preservation of francophonie" (Ghai, 1985:46) and this resulted in a rebel movement on Santo. Demands for regional autonomy were, in part, a reflection of regional diversity and differences in cultures and experiences of regional growth in colonial Melanesia.

It may be argued that the system of administrative decentralisation is a good thing in that it allows for popular participation, but there also are some problems with subnational planning. A major one is the lack of inter-sectoral communication and co-ordination which acts as an obstacle to integrated subnational development. Jackson (n.d.:4), discussing the Papua New Guinea situation on mineral resource development, identifies the lack of co-ordination and departmental conflicts at both national and provincial levels. There are "periods of considerable animosity between staff of the Department of Minerals and Energy and that of Environment and Conservation" (Jackson, n.d.:4). This is not an unusual phenomenon in the case of Papua New Guinea. These conflicts are also partly re-enforced by the fact that in some cases regional functions and responsibilities transferred to them are not clearly differentiated from those performed at a national level.

Development plans for countries in Melanesia state a national objective for more balanced development in a spatial sense, as is the case with the Republic of Vanuatu. There is also some element of plans calling for national integration and a reduction in fragmentation. This is very important across the island states in Melanesia since many of them have diverse physical geographies, natural resource endowments and cultures. The smallness and archipelagic nature of states such as Vanuatu pose specific rural development issues which have implications for subnational development planning.

2.5 Conclusion

This Chapter has shown that defining the term "development" is difficult; there is no strict or generally accepted definition. The term means different things to different people, thus it is culture specific. "Development" is generally taken to refer to attaining increases in the quality of life of the majority of the people and achieving the desired political goals of a society. While this definition is more relevant to the urban-industrialised countries, Melanesians increasingly lay emphasis on visible elements, which include the provision of socio-economic infrastructure such as schools, airfields, health centres, water supply systems and roads.

The term "rural development" is also difficult to define, although this strategy is particularly oriented towards welfare improvement of people in the rural areas. In the case of post-colonial Melanesia rural development is generally viewed as a series of integrated programmes which include the development of forestry, fishing, agriculture, service infrastructure (water supply, transport, health, education) and commercial enterprises.

Rural change in post-colonial Melanesia has to be understood in the context of an overall framework of socio-economic and political institutions, most of which had been established under colonial rule. Attitudes of colonial governments towards regional development planning, the question of land tenure systems in creating opportunities for rural change and the rural dwellers' attitudes towards these changes are important considerations in this respect. These institutional arrangements have also been important influences in creating income differentiation within the rural societies of Melanesia. The degree of access by the rural villagers to opportunities for participating in cash-generating economic activities and utilising a range of assets, amenities and utilities is significant in the villagers' perceptions of progress towards prosperity.

CHAPTER THREE

DEVELOPMENT PLANNING AND CHANGE IN VANUATU

The Republic of Vanuatu (formerly known as the New Hebrides) is a "Y" shaped archipelago of some 80 islands of which 67 were listed as inhabited around 1980 (Bedford, 1989:11) (Figure 3.1). In addition there are several very small islets off the coasts of the larger islands of Efate, Santo, Malakula, Anatom and some very small islands in the Banks and Shepherds groups. These islands do not have any resident population but the land is used for subsistence gardening and cultivation of cash crops (Bedford, 1989:11) and tourism (Republic of Vanuatu, 1991:22). Some of the lagoons or reefs are also important fishing grounds for their local populations.

The archipelago has an approximate land area of 12,000 square kilometres (Browne and Scott, 1989:157) and a sea area of 680,000 square kilometres (Cole and Parry, 1986:3). In 1989, the country had a population of 142,944 people who speak more than 100 different indigenous languages in addition to French, English and Bislama (local pidgin) (Republic of Vanuatu, 1991). The great majority of the population are rural resident with 80 percent (1989 National Census) living in small nucleated or dispersed communities which rarely have more than 300 residents.

Westernisation has brought into existence a small but significant stratum of ni-Vanuatu who are urban based, professionally trained, and increasingly individualistic in outlook (Premdas, 1987:110). Inequality and class distinctions are more evident in the urban sectors where ni-Vanuatu wage earners, professional persons, and civil servants obtain lucrative employment that sets them apart from others as well as their rural compatriots (Premdas, 1987:121). In addition, monetisation of the economy and the dominance of cash cropping by

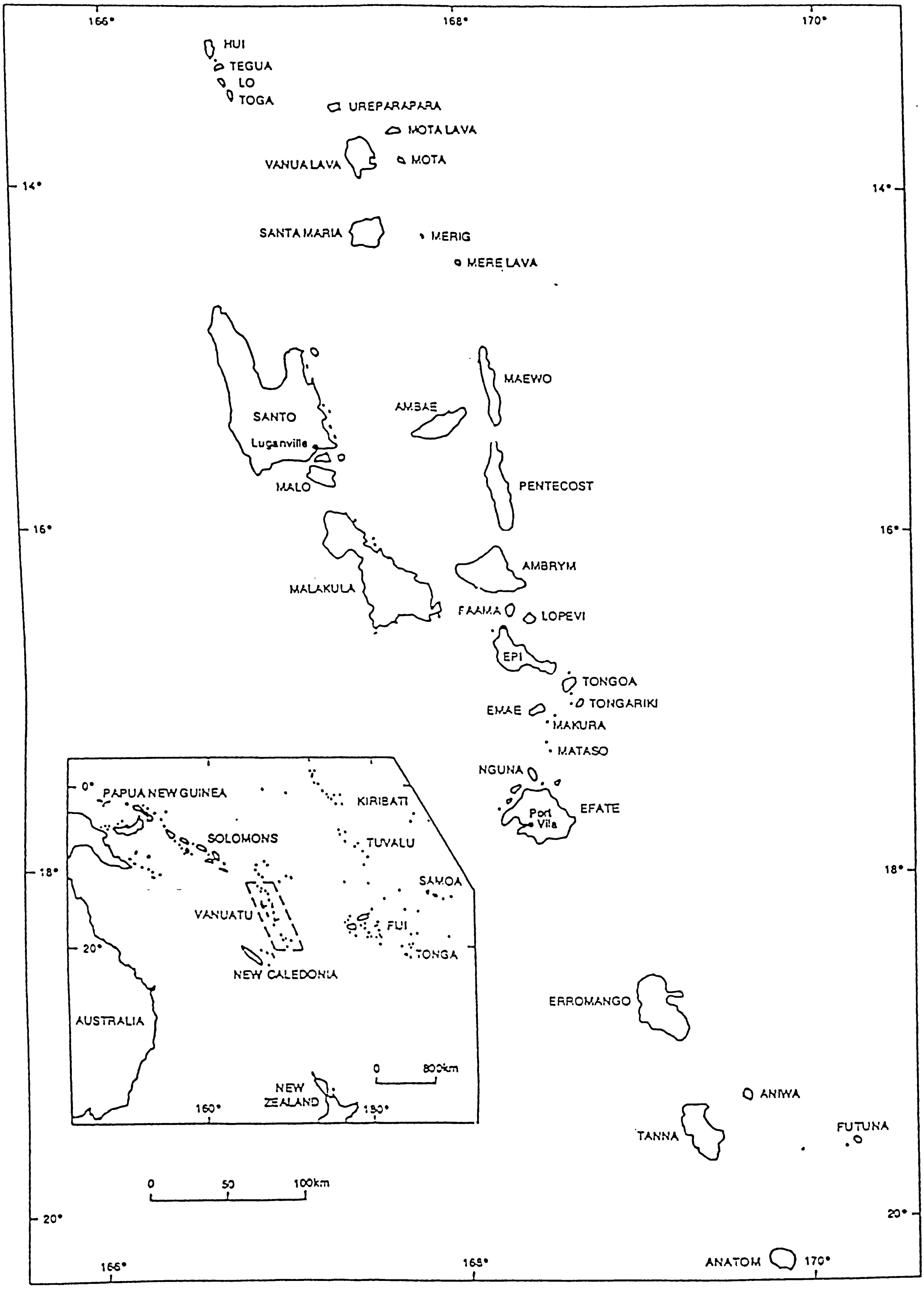


Figure 3.1 : Republic of Vanuatu

private enterprises also contribute to the considerable influence of western cultural artifacts and tastes on ni-Vanuatu values and lifestyles.

Most people live on the coastal plains. The interiors of many of the larger islands are difficult of access, mainly because of the mountainous terrain. However, sizeable inland populations still exist in Santo, Malakula and Tanna (Bedford, 1989:12). Since the Second World War, due to improved access to institutions such as schools and health centres, there has been a considerable movement of people to the coast. Examples of such movements have been recorded in the islands of Ambae, central Pentecost, north Ambrym and Santo. They have been "mainly short-distance migrants seeking land for new gardens or cash crops" (McArthur and Yaxley, 1968:, cited in Connell, 1985:39).

3.1 Colonial legacies

Ni-Vanuatu first had contact with Europeans in 1606 when Pedro Fernandez de Quiros landed in Santo (Douglas, 1986:23). There was little further contact until the 1840s when traders and missionaries began to arrive. From 1887 onwards England and France assumed control of the archipelago. In 1904 an Anglo-French declaration raised the notion of a "sphere of joint influence" and laid the groundwork for the Condominium, which was established by the Convention of 1906 (Weisbrot, 1989:67). Thus, a "dual-headed state emerged" (Premdas, 1987:113). The French and the British appointed resident staff in the country to oversee their citizens' interests. However, this arrangement proved inadequate for maintaining order, especially with the expatriates' growing interest in acquiring land. This eventually led the British and the French to negotiate a more comprehensive Condominium "Protocol" in 1914, though they governed the archipelago jointly (Premdas, 1987:113).

In 1980, when the Republic became an independent state, this Condominium administrative structure was dismantled. The seven decades of nonconsultative administration (Premdas, 1987:113) led to what was to be a "chaotic colonial administration" (Haberkorn, 1987:33). There was duplication of functions and the development planning which occurred was carried out on the basis of each metropolitan power's own interests and priorities. One outcome of 74 years of joint administration was duplication of activities in the socio-economic sector and a lack of co-ordination among departments.

The colonial Condominium was organised on the basis of equality of government and coexistence of the respective jurisdictions. The separate, but similar policies led to separate education systems (mainly run by missions), police forces, and medical services, two national anthems, two currencies and three official languages (French, English and Bislama). This produced a rule

> so inefficient and cumbersome that it was popularly known as the Pandemonium. The Vanuatu people were neither consulted in its establishment nor involved in its operation (Molisa et al., 1982:3 cited in Weisbrot, 1989:65-66).

Consequently, after political independence in 1980, the government of Vanuatu was faced with the considerable problem of integrating these separate administrative functions inherited from the colonial administration. For example, in the case of the education system it has "not been possible to amalgamate facilities to any significant extent" (Republic of Vanuatu, 1989:408). The education system in the Republic was the subject of major reviews in 1984 by the World Bank and the New Zealand Government. The major constraints the World Bank identified were:

> inadequate planning, implementation and evaluation; high costs of education provision; and the large number of untrained teachers and the poor supplies of learning materials which led to pupil under-achievement (Republic of Vanuatu, 1989:407).

The Condominium system of administration in Vanuatu generated some opposition. This opposition took a number of forms such as the John Frum cult movement on Tanna from the 1940s, and the Nagriamel Movement led by Jimmy Stephens in the 1970s. He demanded, at the United Nations, that the country become independent in 1971, for while the British wanted to leave, the French wanted to stay. There was no programme for independence until well into the late 1970s (Connell, 1985:3). The Vanuaku Party (literally meaning, "My Land Party") won a majority in elections in 1979 (Weisbrot, 1989:65). Father Walter Lini became the Chief Minister and following independence was Prime Minister until October, 1991 when Donald Kalpokas became Prime Minister after moving a vote of no confidence in Father Lini.

The transition to political independence in Vanuatu was not as peaceful as it was in some other Melanesian countries, such as Fiji and the Solomon Islands. There were similarities with the experience in Papua New Guinea. In Papua New Guinea micro-nationalist movements, such as Papua Besena, the Matanguan Association Movement of the East New Britain Province and the secession movement in Bougainville (now known as the North Solomons Province), were common (May, 1982). The John Frum cult movement of Tanna and the Nagriamel Movement on Santo and selected islands of Vanuatu were a threat to the national unity of an emerging independent island state.

3.1.1 Custom and the way of the land: potential or a constraint to rural change?

Land alienation for various development purposes in the archipelago was common during the colonial era. Molisa et al. (1982:26) indicated that the land area in Vanuatu that had been alienated was

> over 12 %, and perhaps as much as 20%, of the land area of Vanuatu had been alienated, 10% (still) registered to French interests and companies and 2% mainly to Australians and an increasing number of Americans.

The alienation of traditional land by expatriate settlers in Vanuatu not only served foreign interests but also prompted local people to realise the value of their own traditional land. Copra production became a very significant form of economic activity for rural dwellers during the colonial period. Rodman (1984:65) has argued that while large tracts of land were alienated by expatriate planters in Longana on East Ambae, this land was never cultivated. Eventually, however, there was the development of peasant copra production.

Jolly's (1992) comparison of custom and the way of the land with reference to Vanuatu and Fiji illustrates the view that rural dwellers were strongly attached to the land. Unlike Fiji, where land was codified early in the colonial period, the colonial administration in Vanuatu did not recognise and codify customary land tenure. Colonialism, to the local people, was associated with theft; the immoral occupation of their places by foreigners. The land issue "became the crucial issue in anti-colonial and nationalist movements and was the basis both of hostility to Europeans and of an independent sense of ni-Vanuatu identity" (Jolly, 1992:340).

The return of customary land to indigenous people after independence in 1980 opened up new opportunities for cash crop production, despite the fact that by the end of the Second World War, many ni-Vanuatu had become commercial producers of copra (Rodman, 1987). The customary land tenure system was not necessarily a constraint on capitalist development in Vanuatu (Rodman, 1984; 1987). In the case of Longana, rural copra producers were using their own customary land from which income was derived to pay for various consumer goods and services. There was a period of relative prosperity for landholders when they were integrated into the wider economy through copra production. However, income generated from copra production by the producers was unequal. Thus, there emerged rich peasants in the area as a result of inequalities in customary land distribution. This meant that large landholders in the late 1970s invariably made more copra from large plantations established in the 1930s by their relatives. They earned more income from the sale of the product and this increasingly differentiated them from smaller landholders (Rodman, 1984).

Customary land ownership does not necessarily reduce the potential for participating in cash-generating economic activities. It allows rural dwellers to make use of their land for a variety of purposes, such as for subsistence as well as for growing a variety of cash crops. Sometimes this land can be "reserved" depending on the cultural importance of the particular area.

3.2 Planning and development: problems and issues

As already mentioned the historical experience of joint administration produced a duplication of activities, rather than co-ordination of administrative, judicial, educational and health services. This sort of administration led to decisions which were only short-run, resulting in local support for one or other of the colonial powers (Republic of Vanuatu, 1989:2). Such a system of administration promoted and accommodated the very antithesis of integrated planning (Republic of Vanuatu, 1984:22).

The Condominium system of administration not only made the notion of integrated planning impossible, but also had much influence on the pattern of distribution of physical infrastructure, commerce and administrative services. The main urban cores of Port Vila and Luganville were favoured. Some of the government services were largely financed by assistance from France and the United Kingdom. Thus, when the country gained its political independence in 1980 it inherited numerous social services, such as schools and health centres, which have been expensive to maintain during the post-colonial period. The cost of maintaining infrastructure has also meant that quality has slowly deteriorated over the years since independence. In the context of this dual administration and service provision, Browne and Scott (1989:157) have pointed out that over a period of 75 years

> a complex administrative structure was built, featuring parallel British, French and joint services. There was no integrated public expenditure program, as each administration financed and administered projects according to its own priorities and special interests.

Brookfield (1975:67) makes reference to the uneven spatial distribution of capital works expenditure in the 1971 development plan for the Condominium. He noted that of the total of 9 million dollars allocated for public works, communications and development, only 15 percent was allocated to areas in Vanuatu outside Efate and Espiritu Santo. Yet the islands without urban areas had 70 percent of the population. Of the remaining investment, 67 percent was allocated to projects on Efate and Espiritu Santo and 18 percent to projects outside Vanuatu. This propensity for the colonial administration to focus development in the urban cores did not necessarily serve the interests of the rural majority. Colonial planning was characterised by urban-bias, a common phenomenon in the Pacific and other parts of the "underdeveloped" world.

When the Condominum administration drew up development proposals to promote regional growth during the 1970s, there were a number of inherent structural problems which inhibited the potential for their success. Two of the main problems referred to by Browne and Scott (1989:162) were:

> a. Duplication of government services by the French and British administrations which resulted from drawing up separate development plans and proposals.
>
> b. A poor transport system, which inhibited the development of economic opportunities throughout the country.

The duplication of government services, shortage of skilled human resources, and poor transport infrastructure did have a significant negative influence on development in the outer islands. A pattern of spatial development that was uneven and fragmented was in motion. It is no wonder that the post-colonial administration in Vanuatu has placed a high priority on achieving balanced rural and regional development.

3.2.1 Development planning and change in post-colonial Vanuatu

During the colonial period, development planning was dominated by a "top-down" approach. The development of physical and commercial infrastructure by the joint administration was based on, and oriented towards, the metropolitan powers' interests. When Vanuatu gained its political independence in 1980, the administrative structure and regional planning practice inherited from the colonial administration were dismantled. Regional governments were established that were seen as appropriate institutional arrangements for facilitating rural and regional development. The devolution of administrative powers through the establishment of eleven Local Government Regions in Vanuatu became apparent in the early 1980s through the "Decentralisation Act". This institutional arrangement was a suitable mechanism, not only for encouraging sub-national development planning, but also for providing a suitable link between the "grass-roots" population and the national government's needs. Thus the idea of a "bottom-up" approach to development planning began to be emphasised in the early 1980s after the establishment of Local Government Councils (LGCs) in the archipelago.

The fundamental roles of these councils specified in DP2 were to "provide local-level administration; create and involve local participation in the development process; and promote economic and social development within the respective LGC regions" (Republic of Vanuatu, 1989:163). The establishment of eleven Local Government Regions in Vanuatu should be understood in the context of providing a suitable institutional framework for conducting local level development planning despite the view that "such concepts as 'decentralization' or 'integration' seem out of place in relation to tiny scattered islands with a handful of residents" (Overton, 1990:35).

Development planning in post-colonial Vanuatu is carried out at both sub-national and national levels. National planning activity includes a review of the current situation of the economy and the welfare of the people; an assessment of the amount of financial and other resources likely to be available to the country for development during the plan period; and some decisions on how to steer the country towards its stated objectives during the plan period. These activities are conducted within a framework constrained by awareness of fiscal limitations and possibilities for economic growth. In order for stated objectives to become a reality, national planning requires information upon which decisions can be made to balance demands from each sector of the economy and the regions of the country. Thus one of the first steps in planning is to produce statements of objectives and strategies and lists of priorities.

Planning practice in Vanuatu involves a "top-down" approach with the National Planning and Statistics Office (NPSO) preparing National Development Plans, appraising proposals for new projects, and monitoring existing projects. On the other hand, a "bottom-up" approach to development planning is present within the framework of the eleven Local Government Regions. Development projects implemented at a community level usually require economic evaluation in order to be considered viable for funding. While these evaluations are based on established economic criteria, perhaps more crucial in the case of Melanesian rural communities is the need to assess the aspirations and the felt needs of rural dwellers in the outer islands for justifying project development. Thus sub-national planning performed by the eleven Local Government Regions, in close consultation with the rural people, plays an important role in the identification of priority areas for project development.

All government departments and ministries are part of the planning system whereby decisions are made with regard to their own development objectives and programmes. Local Government Councils obtain their funds through local revenue collection (taxes and fees), grants from the national government, and project aid. These Local Government Councils have their own regional planners, and their plans and requests for projects are sent to NPSO through the Department of Local Government (DLG) and the Ministry of Home Affairs. Since the government has been brought closer to residents in the outer islands by this planning mechanism rural projects, which have been identified at sub-national and community levels, reflect better the needs and aspirations of the majority of the rural population. Thus planning for development can be contextualised as a three sided contest in which the interests of the local people, the politicians, and the technocrats, planners and bureaucrats are represented. Their different needs and aspirations invariably do have a significant influence on the types of development which are implemented within rural areas in Vanuatu.

Since appropriate institutional arrangements to deliver development to rural dwellers have been established at a sub-national level, it is useful to examine the experiences of post-colonial development in two of the LGCs. This assessment is significant because one of the main roles of the Local Government Councils, among other objectives, is "to create and involve local participation in the development process" (Republic of Vanuatu, 1989:163). How far the planner's rhetoric of bringing development to the rural people through this institutional arrangement has become a reality in the rural periphery will become clearer when two case studies of post-colonial development in Mota Lava and Ambae are examined in Chapters Five and Six.

3.2.2 National development plans, 1980-1990

Development planning in post-colonial Vanuatu is carried out on the basis of a five year cycle and the plans have been published as National Development Plans. Since independence in 1980, the country has produced only two Development Plans (DP1, 1982-1986; and DP2, 1987-1991). The third Development Plan (DP3), covering the period from 1992-1996, was expected to be released in mid-1992. The implementation of development policies aimed at achieving "balanced" rural and regional growth can be assessed by examining project expenditure. In this way it is possible to establish crudely whether policy advocating "balanced" rural and regional growth has actually been supported by investment allocations.

The planner's objective of focusing on attaining "balanced" rural and regional growth is a direct response to inter-regional socio-economic disparities inherited from the colonial era. This development policy implies that all regions in the country undergo a development or transformation process that will produce rural prosperity in the different administrative regions of the country. The eleven administrative regions have different populations and densities, varying natural resource endowments, a range of opportunities for generating local revenue to support development initiatives, and different relative locations to the urban cores and access to social services. Due to this diversity, there will be different rates of economic, social and environmental change in post-colonial Vanuatu.

The planning philosophy to promote "balanced" regional development is articulated in the Preface to DP2. Here the former Prime Minister of Vanuatu, Father Walter Hayde Lini points out that

> this society can best develop [at] its own pace and in a manner that ensures that the fabric of society is safeguarded from the adverse effects of a too rapid development process (Republic of Vanuatu, 1989:i).

The "pace" of development is to be based upon the style of development, and the type of rural change, that is appropriate to the majority of the rural people, taking into account the cultural values of the society in transition. This is consistent with the planning objective of protecting ni-Vanuatu culture.

Planning for rural change in the 1990s must be conducted in close consultation with the majority of the rural population if the sort of problems that were encountered in the implementation of rural development programmes in the provinces of Papua New Guinea are to be avoided. In that country there was a lack of consultation by the national government and the provincial governments with the local people who were identified as beneficiaries of the integrated rural development programmes (Crittenden and Lea, 1989). These programmes have consumed a large proportion of capital expenditure but have brought about little positive change in the communities. This failure arose from a lack of understanding of rural dwellers' perceptions, needs and aspirations for development.

In Vanuatu the production of a Regional Development Profile in 1983 was a significant step towards strengthening consultation on development needs between the national/regional governments on the one hand and the local people on the other. It is a means by which the particular development needs and aspirations of the majority of the rural people are examined. For example in 1990, Ambae/Maewo and Pentecost Local Government Region produced a 10 year Regional Development Plan (1990-2000) with the help of a Regional Development Planner based in the region's headquarters in East Ambae. The introduction to the Plan states that:

> The purpose of this 10 year Regional Development Plan (1990-2000) is to embark on fundamental economic and social changes that will bring progress and prosperity to the people of the region through the improvement in their levels of living. The plan, thus, is a pointer to the region's course of action within the broader framework of the national development policy (Dadza, 1990:1).

A similar regional development plan has also been written for the Banks/Torres Region. These plans include inventories of the present socio-economic infrastructure of the islands, evaluate the potentials and constraints for rural change within the context of natural resource endowments, and detail cash-generating economic activities. They establish a micro-level regional development framework for facilitating rural prosperity at a community level.

Development projects and programmes in rural areas have been identified by the Local Government Councils in the eleven council regions of the archipelago. Identification of the projects was achieved at a series of workshops organised by the Department of Local Government which had the job of establishing project priorities. This process allowed for some local participation of villagers in the overall plan preparation. These projects and programmes were then included in the development plans for funding during the course of the plan period.

Sazanami and Newels (1989:9) indicated that about 6,000 local projects were identified during the DP1 and DP2 periods. The projects and programmes are listed in tables at the end of each sectoral chapter in the plans. For example, 103 projects (including joint-ventures and Vanuatu Commodities Marketing Board projects) were identified for implementation during the DP2 period in the agricultural sector, 24 in forestry, 53 in fisheries, 64 in transport and 23 within communications. There is no breakdown of specific projects by region, although priority areas of development activity are identified for Local Government Regions (LGRs). The list contained in DP2 has been reproduced in Appendix II. It is interesting to note from the list that infrastructure development is given high priority in all regions.

Implementation of these programmes and projects invariably depends on the availability of human and financial resources. For example, the peaking of total estimated budgetary requirements in 1989 for agricultural projects was entirely due to provision being made for implementation, in that year, of the South Santo Cocoa and Coffee Projects (190 million vatu), and for the purchase of a cattle barge (112 million vatu). In practice, since the feasibility studies were not done for either project by 1989, they had not been implemented during the DP2 period (Republic of Vanuatu, 1989:218).

The experience of plan implementation suggests that many development budget allocations made at the time of preparing DP1 were not well designed. This was because the National Planning and Statistics Office and the sectoral agencies had little prior experience of planning and development budgeting (Republic of Vanuatu, 1982:97). Slow progress in the implementation of DP1 programmes and projects was also caused by the fact that external aid to fund various projects was delayed, largely because of a non-matching of donor priorities for their aid allocations and the government's sectoral priorities. Another significant problem was the absence of data on household economic activities in rural areas, data which could be used to measure achievement of the plan's objectives. These difficulties support the view of Sazanami and Newels (1990:7) that since many small island states have only recently become independent the idea of regional planning practice is recent and the institutions concerned with subnational development have limited planning experience.

There were significant improvements in the design and costing of programmes included in DP2. The planning capacity of the NPSO was well established by the DP3 period. This is illustrated by the fact that in 1990 the Statistics Office, with some assistance from the Asian Development Bank (ADB) and the United Nations (UN) produced, for the first time, a set of official accounts for post-colonial Vanuatu. As was stated in Vanuatu Weekly (18/05/1990):

> The accounts cover the activities of the private sector as well as of the Government. The accounts show the contribution of various industries to the total production...and how the income generated from that production is spent. The national accounts provide a valuable aid for planning and economic management, and already they have been used extensively in preparing the Second National Development Plan.

This indicates that the capacity of Vanuatu's planning institutions has been strengthened during the last decade. Various sources of data are now available including a series of Agricultural Surveys carried out in 1983/1984 by the Statistics Office (Republic of Vanuatu, 1986). Other recent information includes Smallholder Agricultural Surveys (Republic of Vanuatu, 1990 and 1991). These surveys provide very useful information on economic activities of sampled households in the archipelago. They are invaluable data sources for determining the priority areas of rural development in the outer islands because they provide significant insights into the activities of rural people.

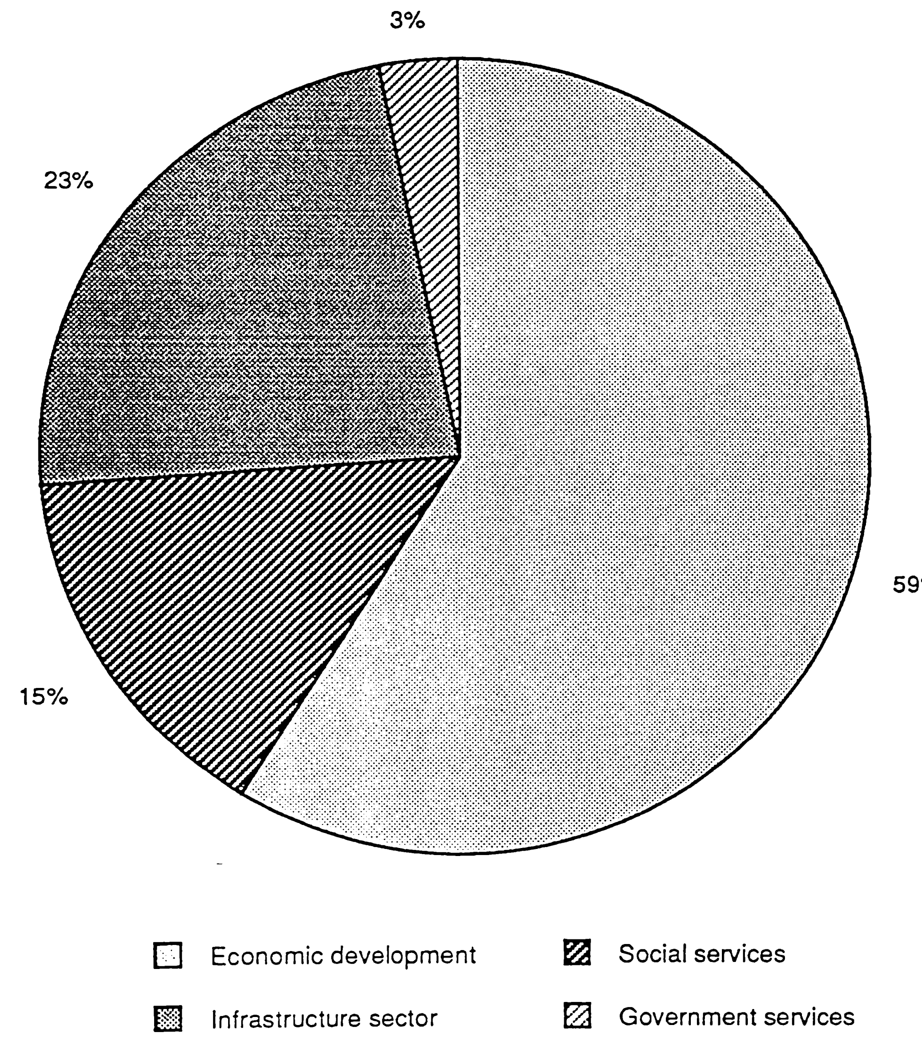
3.2.3 Allocation of expenditure

Figure 3.2 summarises the planned expenditure for various sectoral developments during the DP1 period. These sectors have been grouped into four categories: economic (agriculture, fisheries, forestry, mineral resources, manufacturing, trade/co-operatives, finance and tourism); social (health, education, public safety, and social affairs); infrastructure (transportation, communication, energy and water supply); and Government services.

Of the 11.5 billion vatu investment programme about 59 percent was allocated to the economic sector, 15 percent to the social sector, 23 percent to infrastructure and the remaining 3 percent to Government services. Agriculture absorbed the greatest share of development finance because of major coffee, cocoa and copra projects. These included joint-venture projects on Malakula and Tanna, implemented during the DP1 period, and supported and funded during the DP2 period.

The cocoa estate in north-west Malakula is a joint project between the Vanuatu Government, the Commonwealth Development Corporation (CDC) and local custom landowners. This project was set up to develop about 1,500 hectares of cocoa in 1983, but by 1989 only 500 hectares had been developed. Planting was below expectation due to dry weather conditions during the 1984 and 1985 planting seasons.

The second major joint-venture is a coffee project in Tanna, established in 1985. It involves the Government, the CDC and the local landowners. This project also experienced delays and during the DP2 period it was behind schedule. It was anticipated that about 475 hectares of coffee would be established by the end of 1989. The main reason for the delays was the difficulty in upgrading access roads to the project area. A third joint-venture is a cattle project involving the National Government and two private Australian investors. The project covers



Source: Republic of Vanuatu (1982:47)

Figure 3.2 : Planned expenditure for various sectoral developments, 1982 - 1986

an area of 8,400 hectares in south Espiritu Santo and presently contains about 7,500 head cattle (Republic of Vanuatu, 1989:187).

The integration of custom landowners into these large scale projects indicates the national government's policy of encouraging local people to participate in commercial production through joint-ventures. This is particularly helpful to the local landowners given the large capital expenditure that is required to start and maintain the projects.

Although coffee and cocoa planting have been below expectation, financial benefits that are likely to be generated from the development of these cash crops in future should bring prosperity to the landowners. These projects can be regarded as a basis for demonstrating new agricultural innovations to the rural dwellers. Through the "demonstration effect" of coffee growing, as was the case in the Highlands of Papua New Guinea in the 1950s and 1960s (Lacey, 1982), local villagers may be encouraged to embark on small-scale development projects on their own land.

The development of the various sectors within the national economy is crucial for rural progress. Each is dependent on the other in the sense that some of them act as catalysts for rural change in combination with other sectors of the economy. For example, the Government's policy objective of diversifying and expanding agriculture not only depends on outside market forces, but also on how well the main cash crop producing areas are linked to the market centres at both the regional and the national levels. The rural dwellers' attitudes towards the cash economy also affect the potential for expanding agricultural production. In this regard, the role of transport in linking the various population centres becomes critical.

Improved shipping services and expansion of land transport can open up new areas for economic production and link existing productive areas to marketing and/or distribution centres. Reference has already been made to the lack of access roads to facilitate the planting of coffee trees on Tanna which is a good example to illustrate this point.

While transport investment facilitates the mobility of people and goods, it is also made for economic, social and political reasons. Such investment is justified economically because transport provision can lead to increased production and consumption, thus improving national economic welfare. It can also be justified on social grounds because transport is needed for access to markets, health, education and administrative services. This investment can also be justified politically because it has allowed for integration of isolated communities which show differentiation and diversity in their cultures. This should improve national consciousness and unity.

The Second Development Plan included provision for expenditure of 29.3 billion vatu. Total allocations by sector on development projects are as follows: 23.5 percent for economic sectors, 30 percent for infrastructure, 22.4 percent for the social sectors, 12 percent for human resource development programmes, four percent for the regional programmes, including a contribution to the Regional Development Fund and seven percent for other government services (Republic of Vanuatu, 1989:99). This planned expenditure is shown in Table 3.1.

The allocations of development funds in both DP1 and DP2 suggest consistency between both Development Plans in supporting the expansion of productive capacity in agriculture. The development and expansion of cash cropping and animal husbandry should benefit the local population and set in motion a path to greater rural/regional prosperity.

The provision of transport infrastructure, the diversification of the productive economic base, and the availability of funds to meet planned expenditure at a regional level are important in the context of encouraging and facilitating the development of small-scale cash-generating economic activities in rural areas of Vanuatu. This is because currently cash crops, such as copra, provide the largest source of export earnings and are the main cash earners for most rural households in Vanuatu.

Table 3.1: Summary of budgetary requirements by broad sectoral classification, 1987-1991 ('000 vatu)

A. Broad sectoral classification	total	% share
1. Macro-economic and plan implementation	5,018,120	17.1
2. Economic sectors	6,908,652	23.5
3. Social sectors	6,575,731	22.4
4. Infrastructure sectors	8,815,864	30.1
5. Other Government services	2,027,184	6.9
Total sectoral:	29,345,557	100.0
B Economic classification		
1. Operation costs	3,153,479	10.8
2. Technical assistance	8,679,242	29.6
3. Training/scholarship	2,404,440	8.2
4. Equipment	4,005,095	13.6
5. Capital works	11,103,301	37.8
Total economic:	29,345,557	100.0

Source: Republic of Vanuatu, (1989:100).

3.2.4 Agriculture

The importance of farming in the lives of rural dwellers confirms the need for agricultural development and expansion as a priority of regional development policy if rural prosperity is to be promoted. Food crops grown in the subsistence sector are taro, yams, sweet potatoes, manioc and kava, although the latter crop is beginning to be seen as a cash generator for some households in the outer islands given the low price received for copra. The shift in commodity production from copra to kava by village communities has been also observed by Sofer (1987) and Bayliss-Smith et al. (1988) in the outer islands of Fiji. Rural households in the Longana area of Ambae during the early 1990s have found the growing of kava generates better returns than copra. Moreover, the price for kava is relatively stable, unlike that for copra which is dependent on outside market forces. This process of change in cash crop production from copra to producing and selling kava roots is significant in the context of agricultural diversification.

Rural households in Vanuatu use few modern agricultural and technological inputs in their production of cash crops. A wide variety of local green vegetables, bananas and coconuts are consumed. It is important to recognise the fact that the livelihood of the majority of the rural dwellers in Vanuatu is dominated by subsistence farming with some cash crop cultivation. Connell (1985:4) points out that there are some differences

> between village agriculture, with its combination of subsistence production and some cash cropping, and the plantation sector (principally involved in copra and cattle production) and oriented toward overseas markets.

The involvement of rural farmers in the production of food and participation in small-scale agricultural activities can be classified into three categories: subsistence production, semi-commercial production and commercial production. Subsistence food production is mainly for immediate household consumption, while through semi-commercial production, food and vegetables may be produced for both subsistence consumption and for sale of the surplus in the markets for cash. Production of commodities, such as copra, cocoa and pepper on the other hand, is usually mainly for export to overseas markets.

The agricultural census conducted in the early 1980s found that the agricultural sector was dominated by firstly, a smallholder sub-sector; and secondly, the plantation and large commercial sub-sector. In the smallholder sub-sector, there were 21,000 smallholder households in rural Vanuatu which produced the majority of the country's agricultural exports as well as the subsistence needs of the great majority of the population. They were involved in the cash economy and virtually all produced their own subsistence requirements. On the other hand, there were 160 plantations which produced 20-30 percent of copra and cocoa for exports. The bulk of the investment on plantations was in the cattle industry (Republic of Vanuatu, 1989:181-182).

Agriculture accounted for over 80 percent of exports in 1984 and its contribution to the Gross Domestic Product (GDP) during the DP1 period was about 20 percent (Republic of Vanuatu, 1984:28). During DP2 it was 26 percent (Vanuatu Weekly, 18/05/1990). Agriculture is the most important sector of the national economy, is the principal source of employment and economic activity for the bulk of the population and constitutes the main area of potential future economic development (Connell, 1985:4). It also remains the focus of development strategies, and during the last decade the government has taken steps to strengthen and diversify the whole sector. The encouragement of pepper and cocoa cultivation by local villagers on Malakula and Ambae are cases in point. Their production levels have been very low because some of these crops have only been planted in the past few years and have not yet reached maturity.

Copra

The production of copra as a main cash crop and a source of subsistence for rural households is very significant throughout coastal Melanesia. In Vanuatu an average area under coconuts in the smallholder sector was about 3 hectares per family (Republic of Vanuatu, 1989:128). In some locations households had as many as 20 hectares under coconuts.

Copra output in the country has varied over the years (Figure 3.3). Production was highest in 1981 and 1984 reflecting high world prices. However, in early 1985, the output of the commodity was reduced by Cyclones Eric and Nigel in the main copra producing areas, such as Santo/Malo and Malakula. These Local Government Regions produced, on average, about 11,000 tonnes and 12,000 tonnes per year respectively in the period 1981 to 1986. Production in the outer islands, such as the Banks/Torres Local Government Region, rarely exceeds about 1,400 tonnes per year, with 1,000 tonnes from Tafea (Republic of Vanuatu, 1989:182).

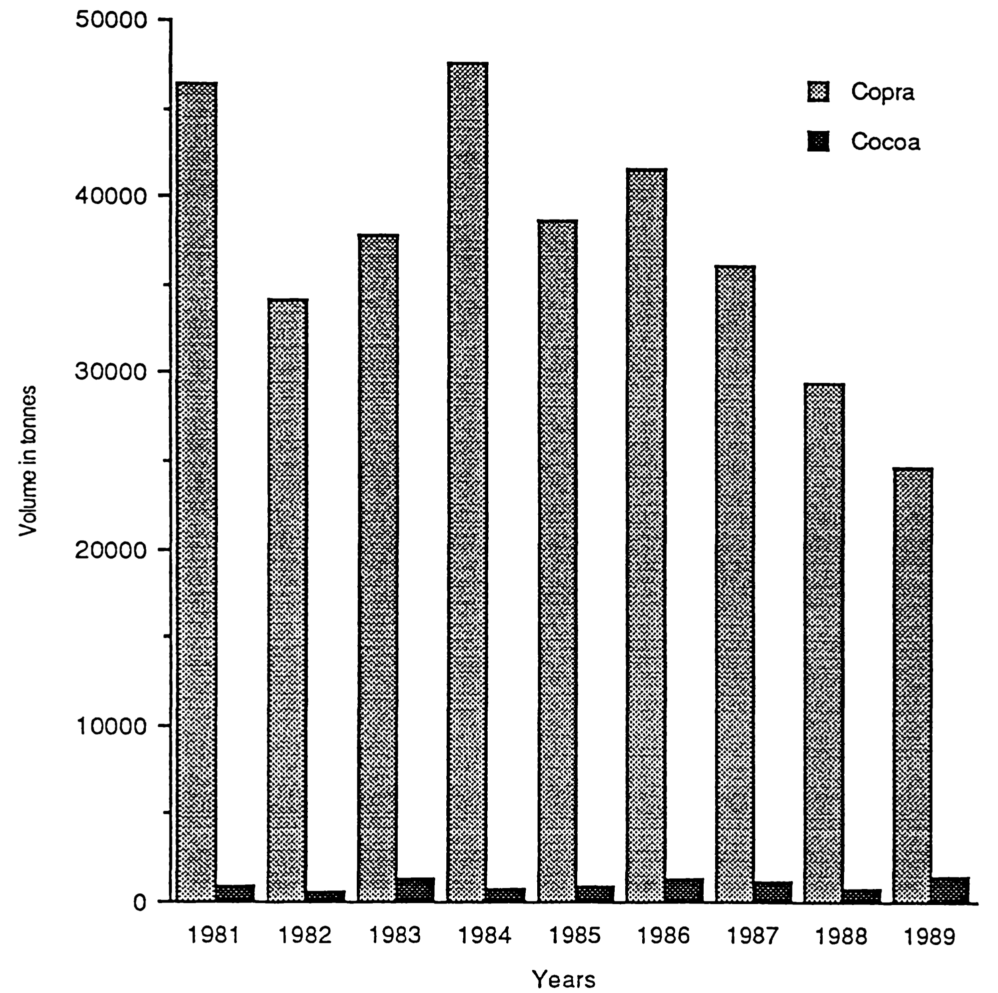
The low production levels of copra from the outer islands is not because people do not produce enough copra. One chronic problem determining smallholder production levels is the frequency and the reliability of shipping services to the outer islands to transport the products to the main ports of export. This situation has been observed on Mota Lava in the Banks region and is discussed further in Chapter Five. Other problems that cause frequent fluctuations in copra production, especially on commercial plantations, are scarcity of labour and the aging of palm trees.

Figure 3.3 shows the production of the two main crop commodities, copra and cocoa, over the period 1981 to 1989. It is apparent that copra is a much more significant cash crop than cocoa. Coffee is also produced but is not a very significant export commodity. On average only about 43 tonnes per year were produced during the period between 1981 and 1989.

Despite variations in the production of these commodities as main cash crops, there are attempts to expand the industry through the smallholder sector. This sector produces about 75 percent of the annual output of the two main export crops of cocoa and copra compared with little more than 50 percent twenty years ago (Republic of Vanuatu, 1989:181). On an average yearly basis, copra received for export during the 1977 to 1983 period was about 30,114 tonnes from smallholdings, while it was only 11,770 tonnes from the plantation sector.

Cocoa

The production of cocoa has also fluctuated over the years since independence. For example, the average production of the commodity was 900 tonnes per annum from 1982 to 1986, although the production levels recorded between 1979 and 1983 were lower at 800 tonnes per annum (Republic of Vanuatu,



Source: Republic of Vanuatu (1990:3)

Figure 3.3 : Output of main commodities 1981 - 1989

1989:182). While production of this commodity has varied over the years, there has been an increase in cocoa plantings on smallholdings and plantations during the DP1 and the DP2 periods. The joint-venture cocoa estate in north-west Malakula is a case in point.

Incentives to increase cocoa planting since the mid-1980s include the establishment and licensing of fermentaries in the rural areas, appointment of cocoa graders, and improvement in marketing arrangements, especially with the involvement of the Vanuatu Commodities Marketing Board (VCMB) in buying and transporting cash crops. Like copra, cocoa too is cultivated on a smallholder basis. During the period 1977 to 1983 about 701 tonnes of cocoa for export came from smallholdings compared with 223 tonnes from the plantations/estate sector (Republic of Vanuatu, 1982:97).

Cattle

It was estimated in 1982 that there were 100,000 head of cattle in the Republic in the early 1980s of which one-quarter (25 percent) were owned by the smallholder sector (Republic of Vanuatu, 1982:98). Vanuatu is self-sufficient in beef, and the export of beef and beef products has constituted a growing proportion of domestic export earnings since the 1970s. The average annual production of beef for export between 1979 and 1983 was 754 tonnes which generated 150 million vatu.

In 1984, about 32 percent of the cattle were on smallholdings, compared with 68 percent on plantations/ranches. The joint-venture cattle project in south Luganville contained about 7,500 head of cattle (Republic of Vanuatu, 1982:99). By 1988, the number of cattle had risen to 38,300 in the smallholder sector and 70,000 on the plantation/ranches (Republic of Vanuatu, 1989:183). The average annual revenue generated from beef exports in 1982-1986 was about 171 million vatu. This meant that the aggregate value of domestic exports from copra, cocoa and beef during 1982 and 1986 period was about 1,470 million vatu (Republic of Vanuatu, 1989:184).

Regional variations

Table 3.2 shows average annual cash crop outputs received for export from different Local Government Regions during the 1980s. There are marked differences in copra and cocoa output from the eleven regions. Santo/Malo and Malakula produce much more copra and cocoa each year than other regions. In addition, these two regions have large populations of 25,300 people and 18,300 people respectively and large land areas. They score well in the arable land that is available for potential agricultural development.

Table 3.2: Average cash crop out-put[a] received for export from different Local Government Regions, 1981-1986 (in metric tonnes)

LGC Region	Copra	Cocoa
Banks/Torres	1,403	2
Ambae/Maewo	4,630	115
Santo/Malo	11,184	343
Malakula	11,273	384
Pentecost	2,042	50
Ambrym	3,588	12
Paama	291	1
Epi	1,554	3
Shepherd	1,044	1
Efate	2,057	12
Tafea	1,150	1

Note: [a] Calculated by adding up the total output of each commodity from the LGC Region in each year from 1981 to 1986 and dividing the total by the number of years recorded.

Source: Republic of Vanuatu, (1989:182).

Planning for rural and regional development in areas which are diverse in terms of environment, population and socio-economic conditions needs to allow for "regionally specific" assessments and evaluations. The need for planning and programming of development to be conducted within a context of regional diversities was recognised in DP2. Other constraints inhibiting the potential expansion of the productive sectors of the economy in the country relate to lack of finance and skilled human resources, significant problems which are also inherent in other independent countries in Melanesia.

During the DP1 period, about 71 percent of development capital was allocated to the primary production sectors which included agriculture, fisheries, forestry and mineral resources. About 10 percent of the capital budget was absorbed by "secondary" production, such as manufacturing, and 19 percent of the capital budget went to the "tertiary" production sector. This allocation of resources reflects one of the Government's objectives calling for more productive use of the country's natural resource base as a means of generating viable and sustained economic growth, as well as achieving a more "even" pattern of rural change (Republic of Vanuatu, 1989:7).

In the next section discussion shifts to the commercial and administrative institutional context within which rural or regional development policies are implemented. Co-operatives and the role of Local Government Councils are especially important in this regard.

3.3 Institutional arrangements for rural development

Co-operative societies have been in existence in Vanuatu since the 1960s, although it has been suggested that co-operative type organisations had been established in the previous decade (McGee et al., 1980:70). These were called "companies" *(kompani)*. They were composed of groups of fellow villagers who pooled labour, cash and other resources to achieve a goal such as the establishment of a store or the purchase of a truck or boat (McGee, et al., 1980:70-71). These objectives do not deviate very much from the experience of early co-operative societies in Papua New Guinea (Grey, 1972; and Snowden, 1988). As noted in Chapter Two, co-operative movements in Papua New Guinea were a way of directing "potential forces of resistence" into safe channels and thus diverted leaders from political activities (Snowden, 1989:358). On the other hand, the anglophone co-operatives in Vanuatu were the core of a political movement as much as an economic one (McGee, et al., 1980:72). Thus the New Hebrides Cooperative Federation (NHCF), was a "semi-political and partially anti-colonial force" (McGee, et al., 1980:72).

3.3.1 Co-operatives and rural change

Co-operative societies had been established in most villages in Vanuatu by the 1970s. These societies have been providing services both for the marketing of copra, cocoa, coffee and the sale of consumer goods to rural residents. In 1973, village co-operatives were linked into two national consumer and marketing societies. They were, the British administered New Hebrides Co-operative Federation (NHCF) and *Société Coopératif Administration Français* (SCAF) administered by the French. These societies were both commercial trading organisations, controlled by, and serving their member societies. Funds, basic book keeping and management training came from the respective Condominium administrations.

Following independence, the French Government ceased to provide financial and technical assistance to their Society. On the other hand, NHCF was re-organised and became a newly created national private institution known as the Vanuatu Co-operative Federation Limited (VCF). Shares in the VCF were held by the village co-operatives and it has become the main body responsible for co-operative trading activities in the 1990s. Its main functions include the marketing and distribution of consumer goods to member societies in the rural areas. Some co-operatives operating at a village level also buy copra and other cash crops from producers in the outer islands.

An important role of the VCF during the 1980s was to provide business management training and counselling to its members. It has also provided business development support for co-operatives and groups working in the productive sectors of the economy. The VCF introduced regional co-operative associations within the different regions of the archipelago (Republic of Vanuatu, 1989:300). Some of them have continued to survive while others have experienced declining prosperity and some have completely closed down.

While the numbers of members increased nationally between 1972 and 1985 (Republic of Vanuatu, 1989:301), the experience on some islands has not been very impressive. A number of co-operative societies in the outer islands, such as in East Ambae and Mota Lava, have closed down due to organisational difficulties (Field survey notes, 1991). These difficulties have been further compounded by the withdrawal of shares by members when they saw that the co-operative societies were not operating adequately. The money refunded to members was reinvested in other business enterprises such as small trade stores. Some of the former members have now become small business entrepreneurs who sell basic consumer goods in their own villages. They have also become "middlemen" in buying and trading copra.

Co-operatives, which have been involved with marketing of copra, cocoa, coffee and other produce for a long time, have experienced fluctuations in supplies of commodities. There are alternative outlets for marketing produce in the outer islands. Small trade stores have become well established in copra buying and selling of goods. Nevertheless, co-operative societies still assume a significant role in the marketing of copra. Their share of total domestic sales of smallholder copra is currently in the range of 25 to 30 percent and it is 50 percent for cocoa. These societies have certainly played a significant role in importing and distributing imported food and household items.

During the DP2 period Regional Commercial Centres were established in selected priority areas of Vanuatu. The criteria for choosing these priority areas have not been clearly defined. Presently there are four Commercial Centres in Vanuatu. One is located at each of Lolowai in East Ambae, Ambrym, Malakula and Tanna. It is intended that each Local Government Region has a Commercial

Centre and currently plans are underway to establish five more in the other non-urban regions of Vanuatu. These centres have warehouses which store Western type consumer goods, and also provide rural people with access to banking and credit facilities. They have also been engaged in the collection of agricultural produce from village co-operatives and individual farmers.

While co-operatives have been viewed as an appropriate commercial institutional network for encouraging rural farmers to expand their cash economic activities, the returns have been limited. This is because the development of cash crops and marketing of other agricultural products is inhibited by the lack of business management skills at a village level. This reduces the success of rural producers in negotiating access to credit, notwithstanding the fact that other bureaucratic procedures to qualify for credits, which are also very complicated, create difficulties for local producers.

A weak marketing and supply network that exists in the isolated island regions of Vanuatu is also an obstacle to inducing rural farmers to participate in cash-generating economic activities. The dispersed population and markets in the island regions pose severe constraints for the effective co-ordination of co-operative activities in post-colonial Vanuatu. These problems are further compounded by the lack of well-developed road and sea transportation networks.

3.3.2 Local Government Councils and rural change

As noted earlier in this Chapter, the institutional context within which planning for rural and regional development in Vanuatu is conducted is the eleven Local Government Councils. What roles have these Councils played in fostering change and development in post-colonial Vanuatu? Since the government has been brought closer to the local communities, their involvement in various development projects within these communities has set in motion a need to integrate rural dwellers more effectively into the cash economy. When Local Governments were first established in 1981, their administrative roles were not clearly defined. This led to an "absence of specific, well-documented tasks" which consequently increased the "hesitancy and insecurity of [their] officials" (Republic of Vanuatu, 1984:320). There was no impetus or motivation for government departments to transfer duties and responsibilities to the Councils. These problems were expected during the period when a decentralised system of administration was just beginning to be implemented. The internal revenue generation capacity from various taxes and fees of the Local Government Regions varies widely.

Their financial grants from the central government also vary, as is shown in Chapter Six. This, in turn, has affected their performance in encouraging rural development initiatives, especially the provision and maintenance of social and service infrastructure in the outer islands. The maintenance of roads, school buildings, water supply systems, and the performance of extension officers based at the Local Government headquarters vary markedly across the country. Some island communities are very remote from the Regional Council centres and find it difficult to benefit from the exchange of new ideas on agriculture and marketing.

Local Government Councils have taken over responsibility for operating services such as health, education, agricultural extension, co-operative services, aerodromes and terminal linkages, fisheries extension centres and social development programmes (Republic of Vanuatu, 1989:47). DP2 clearly points out that the establishment of eleven Local Government Councils in Vanuatu is defined as

> one of decentralised administration with the aim of increasing the effectiveness and responsiveness to bureaucracy; improving co-ordination; and ensuring that decision-making is more responsive to local needs (Republic of Vanuatu, 1989:164).

Thus, the establishment of Local Government Regions should not be contextualised as decentralisation in the form of devolving power to the subnational level and creating another tier of government. Rather it should be understood within the framework of an infrastructure to foster better development in both quality and quantity. In other words, the Local Government Regions in post-colonial Vanuatu serve important functions, such as increasing participation in decision-making and making improvements in the quality of delivery of a range of services and utilities to the rural dwellers.

With regard to the provision of socio-economic infrastructure, the Department of Local Government has also been involved in locating, constructing and maintaining schools, rural health centres, transport infrastructure, markets and cultural centres as well as licensing and regulating commercial activities. Other duties involve levying and collecting taxes, preparing and implementing regional development plans and conducting other administrative and extension services designed to strengthen the core administration of the Local Government Councils.

3.3.3 Transport infrastructure

It is often suggested that the establishment of better transport infrastructure and the development of social services in lagging regions could start a process of sustained growth (Overton, 1990:34). The visible delivery of development, such as transport services, from government and aid agencies to the people also has political implications. Overton (1990) continues to argue, however, that small populations weaken the potential for rural change. In addition, the geographic distance between the island communities can increase the costs of transport operations and thus pose specific difficulties of linking them (Overton, 1990:36). This consequently results in very expensive infrastructure provisions, with high per capita costs in the outlying islands. These problems are evident in other parts of Melanesia especially the rural communities of the outer islands (Bayliss-Smith, et al., 1988). Not only are there high per capita costs involved in the provision of transport infrastructure, but the costs of consumer goods sold in the outer islands are also very high.

These observations are relevant for conditions that prevail in the Republic of Vanuatu. For example, rural roads in Vanuatu

> often pass through sparsely populated areas, handle low volumes of traffic, are difficult to justify in purely economic and financial terms and are unattractive funding prospects to external aid donors (Republic of Vanuatu, 1989:501).

Socio-economic development in Vanuatu is closely associated with the provision of transport infrastructure. This is particularly so in the context of shipping services between different island communities in the archipelago. Due to the archipelagic nature of the country, shipping services play a crucial role in facilitating rural change, particularly in creating incentives for cash crop production. Regular and rapid services linking the towns and the outer islands would also enable farmers in the latter to market food crops.

Transport not only serves economic objectives, but also has social implications. For example, shipping makes consumer goods, health, education and administrative services accessible to rural dwellers. The archipelagic nature of Vanuatu also makes the movement of goods, people and service provision particularly difficult and expensive. These problems have been a major constraint on the expansion of productive economic activities in the outer islands. Many trade and co-operative stores also largely depend on frequent and reliable shipping services to the islands. Poor transport infrastructure has had a negative impact on the survival of trade stores and co-operatives. This, in turn, affects rural dwellers' motivations for embarking on small-scale business enterprises.

The development of transport infrastructure in Vanuatu before independence in 1980 saw a concentration of activities in the urban cores of Port Vila and Luganville. Inter-island services were designed to facilitate the export of primary produce, and secondly to provide access to markets for manufactured items from

France and Britain. These patterns of shipping were further strengthened by the dependence of the country's economy on copra. The end result was that transport services operated in, or to, those islands that produced copra, while those islands not suitable for copra production became peripheral in terms of the transport network.

In the context of the above situation, Dunbar (1981) identified three main shipping areas in the Republic, each with a different level of service. First, was the "core area" and this included islands that had a shipping service once a week. The areas that fell into this category included, Efate in the south to Espiritu Santo in the north. The west coasts of Pentecost, Epi, Ambrym and Maewo were also included.

The second category was the "fringing areas" and these included west Espiritu Santo and Malakula and the east coasts of Pentecost, Maewo and Ambrym. These areas had a shipping service once every six weeks. The third group was labelled the "outer-areas". Included in this category were the northern and southern-most parts of the country, such as the Banks and Torres Islands and Tafea, including Tanna. The frequency of shipping service here was less than once every six weeks (Dunbar, 1981 cited in Republic of Vanuatu, 1989:46).

These three categories of service remain relevant in the 1990s. Indeed by early 1991 some regions were worse off than they were in 1980. Evidence to support this assertion is given in Chapter Six in the context of shipping services linking Mota Lava to the main urban areas on Santo and Efate. If shipping services to the "fringing areas" were unreliable, farmers produced their copra on the basis of risk and uncertainty. The supply of shipping to the Banks/Torres Group and Tafea remains poor and therefore unsatisfactory from the producer's viewpoint, although these areas are serviced by small ships "operating a circular route out of Luganville" (Republic of Vanuatu, 1989:472). Moreover, the extension and monitoring visits by agricultural officers are also infrequent.

Infrequent shipping services to the outer islands are partly caused by the absence of physical infrastructure on the fringe islands. Presently, Vanuatu has two international ports which are located in Port Vila and Luganville. The country also has 19 interisland wharves, of which 13 are located outside the two urban cores. These wharves, however, are in poor condition and do not have on-shore facilities, such as storage sheds and shore-based transportation. This consequently reduces the commercial operation of ships in the islands. It means that for most island communities goods are transferred from ship to shore by small boats. The use of storage facilities is largely restricted to those of the VCF and the Regional Commercial Centres on Epi, Ambrym, Ambae and Tanna. These facilities were constructed as part of the policy of encouraging the development of central trading points (Republic of Vanuatu, 1989:471).

One of the national government's policy objectives during the DP2 period was to ensure more equitable provision of transport services to different parts of the country and to rationalise shipping services to the outer islands through route scheduling. Achievements have been almost negligible, however. The frequency of ships visiting the outer islands has not improved much, and in some areas the service has deteriorated. The idea of concentrating landing stages and storage facilities in areas that show greatest potential may induce the local villagers there to participate in cash crop production, but also encourages the emergence of fragmented spatial development.

3.4 Post-colonial development planning and change in the outer islands: reality or rhetoric?

The post-colonial government's development planning philosophy has continued to emphasise, among other things, a move towards an "even" pattern of rural/regional development within the eleven Local Government Regions of Vanuatu. Achievement of this development objective during the last decade has been minimal. The idea that planning rhetoric contributes towards manipulating "false consciousness" (Bayliss-Smith, et al., 1988:132) in the rural communities within the context of development initiatives has certainly been apparent in Vanuatu. As Bayliss-Smith et al, (1988:131) continue to argue this "false consciousness [is] produced by diffusion of a consumption-oriented mentality in which preferences and aspirations are completely out of touch with the material reality of most locations".

Development objectives which have been pursued during the last decade include balanced regional and rural development, human resource development, promotion of the private sector and economic self-reliance. These objectives have not been achieved because finance for development is a major constraint. Vanuatu has a narrow revenue base with limited domestic funds for development and therefore has been highly dependent upon external funds for achieving its stated goals. Thus there are implications for the types of development activities the post-colonial government is likely to emphasise and articulate given the financial constraints under which planning for rural change and development is conducted.

The deficiency in the revenue base was also illustrated by the fact that during the DP1 period (1982-1986), 96 percent of all development outlays were financed from external sources and this continued to be the same during the DP2 period (1987-1991). This makes Vanuatu one of the highest development aid recipients in the developing world (Cole and Parry, 1986). Apart from the high proportion of development finance that is received from external sources, during the 1990s about 50 percent of central government revenue (excluding grants) has been derived from import taxes.

Australia was the largest single aid donor in 1987 with the former colonial powers of France and United Kingdom ranked second and third respectively (AIDAB, 1990). Planning for rural change in post-colonial Vanuatu has been conducted within the context of "dependent planning" (Ward, 1975) where financial resources to meet development outlays have been derived from outside sources. The large proportion of development finance that comes from overseas aid has meant that investment priorities have been tied to socio-economic projects which the aid donors prefer.

A number of small-scale and large-scale agricultural and non-agricultural projects located within the different Local Government Regions of the country have been funded through the ODA during 1989/1990. They include various activities associated with pasture improvement, cocoa development, forestry inventory projects, primary health care and rural water supply. Some of these projects are already underway in selected Local Government Regions such as Santo/Malo, Malakula and Ambae/Maewo. Their development in the early 1990s should contribute towards regional prosperity, especially the agricultural projects which will serve as positive inducements for the rural dwellers to participate in agricultural activities to generate cash.

While development finance is a constraint there are other structural weaknesses in the economy, such as the limited skills base of human resources. In 1990 only two percent of year 10 students progressed to upper secondary schools. Vanuatu currently has only one qualified ni-Vanuatu engineer (AIDAB, 1990). The country's planning infrastructure has been improved and strengthened during the 1980s, although there is still a strong reliance on expatriate planning expertise. Planning for rural development in Vanuatu is heavily dependent both on external sources of finance, as well as planners recruited from overseas. This means that achievements in human resource development and developing the country's natural resource base have been slow and limited. This in turn means that the goal of equitable regional and rural development in the outer islands remains planning rhetoric rather than a reality.

3.5 Conclusion

Attempts to foster an "even" pattern of rural and regional change throughout the archipelago during the last decade have been a significant challenge for planners at regional and national levels. This challenge is a product both of the country's colonial history and its deep dependence on development funds from overseas sources.

When Vanuatu gained its political independence in 1980, its socio-economic infrastructure was very fragmented. This was because of an urban bias in investment and development. The main lesson from development planning and practice in colonial Vanuatu was that planning was carried out in isolation of the local people: it was the antithesis of integrated development planning. One of the planning philosophies of the first post-colonial government was to make sure that rural/regional development was not fragmented. Development within the eleven Local Government Regions was to be "balanced".

A large proportion of the capital investment during the DP1 and DP2 periods was in the economic and infrastructure sectors. For example, the economic sector (including agriculture, fishing and forestry) during the DP1 period received an allocation of 59 percent from a total investment programme of 11,500 billion vatu. Again during the DP2 period, it was 23.5 percent from the development expenditure of 29.3 billion vatu. Given the heavy concentration of Vanuatu's population in rural areas, this investment in agriculture-related activities and infrastructure was consistent with the Plans' underlying philosophy.

Rural development efforts in the outer islands have been affected by events beyond the control of the island populations. Revenue generated from copra production has fluctuated because of external and market forces. Natural disasters such as cyclones have also had varying degrees of impact on copra production levels. Infrequent and unreliable shipping services hinder the potential for rural prosperity. The effective performance of delivering public services and providing agricultural extension advice by relevant field officers to peripheral locations is hampered by the archipelagic nature of the country and by the fragmented and incomplete urban hierarchy (Ward, 1990a).

Various other institutional arrangements which exist at regional levels have played a significant role in bringing the government and various development opportunities closer to the rural population. Despite organisational difficulties, and problems of insufficient financial resources, the existence of co-operative societies and Local Government Councils are significant. They have invariably integrated the rural people into various monetised economic activities and serve as avenues for expressing development needs and aspirations. Despite some limitations, these institutions have made an effective contribution towards implementing the national development objective of a "balanced" rural/regional prosperity.

CHAPTER FOUR

DEVELOPMENT IN THE OUTER ISLANDS: A RESEARCH METHODOLOGY

The pace and direction of socio-economic change which is transforming rural communities of Melanesia varies considerably from place to place. While colonial history and cultural values have influenced the development patterns in particular rural areas, post-colonial policies, articulated by national planners and politicians, have also played an important role in changing places. The transformation of a subsistence mode of commodity production towards that of market-oriented farming is generally considered to be important in facilitating a path towards sustained rural prosperity. Sofer's (1987) study of a rural community in Fiji is an illustration of "progress through transformation". In this case, rural development was fostered through the re-organisation of a land tenure system to permit more effective involvement by Fijians in cash cropping. In this Chapter an approach to measuring change in rural areas in Vanuatu is outlined.

4.1 Measuring change

In order to measure rural change it is necessary to identify some indices which are culturally suitable and which can be appropriately assessed within the framework of Melanesian rural communities. This is because the ethics of development among rural dwellers in Melanesia have to be interpreted in the context of diverse socio-cultural, economic and political organisations within which particular societies are entrenched (see, for example, Stratigos and Hughes, 1987). This diversity has produced rural environments within which development efforts can be either stimulated or, alternatively, hindered.

Improvement in the access which village residents have to service centres in rural areas is widely believed to have a positive impact on prosperity. The provision of credit facilities, various commercial enterprises, schools, health centres, improved marketing networks and effective transport linkages can be viewed as positive inducements to progress in rural areas. Prosperity at a micro-level becomes a reality when planning philosophies articulated by the national planners and politicians are compatible with, and matched by, the aspirations and needs of the rural population. Without this compatibility implementation of regional and national development policies becomes difficult.

Information on which to base various indices for evaluating change in rural areas is usually patchy. In some cases, data at a national level are too generalised to allow for any detailed analysis of socio-economic transformations which have taken place at a micro-level. The published data in the 1989 National Census of Population and Dwellings (Republic of Vanuatu, 1991) are restricted only to the Local Government Regions. Such data mask the reality of specific changes which are prevalent in the village communities. They are too generalised to be useful for drawing conclusions about socio-economic and demographic changes at village or community levels.

It is in this context that Bayliss-Smith et al. (1988:170) suggest with reference to village population trends in rural Fiji that the "national census cannot reveal adequately the full range of processes that underlie population change". They do not capture the reality of socio-economic conditions which are present at a micro-level. Data generated from household surveys and participant observation provided invaluable sources of information for investigating rural change at a micro-level. These field inquiries gave useful insights into the reality of change in rural areas. In addition, results provided through such surveys can be used by regional and the national planners to assess the "felt needs" of the rural population in question.

Changes in rural areas in Vanuatu are examined in the context of an overall national development objective which calls for an "even" pattern of rural and regional development. This study examines the experiences of rural change facilitated by implementation of various types of socio-economic and infrastructure developments on Mota Lava in the Banks/Torres Local Government Region and the Longana area of East Ambae in the Ambae/Maewo Local Government Region. The experiences of rural change in the selected village communities are assessed in the context of the first decade of the country's political independence. The focus of study is cash-generating economic activities which have fostered, or will help facilitate, rural prosperity in post-colonial Vanuatu.

In order to examine experiences of rural transformation in the two case study areas, it is useful to state the thesis hypotheses upon which a suitable framework for evaluating achievement of the national government's development objectives can be examined and tested. The experiences of rural change and development are more marked in rural communities close to the urban cores than in those that are located on the geographical periphery of the state. The rural communities in close proximity to the core also receive much more attention from the national government in terms of planned expenditure than those island communities which are further away from it. There is a clear spatial dimension that affects the potential for rural prosperity. Thus, in the context of this study, it follows that rural communities in Longana have experienced a period of relative prosperity in comparison with rural dwellers on the more remote island of Mota Lava in the Banks/Torres Local Government Region.

Apart from the spatial dimension that influences the potential for rural change, a social dimension is also very significant. Changes in the socio-economic infrastructure of the island communities in Melanesia result from the integration of the rural dwellers into monetised economic activities. Integration of rural dwellers into the modern economy is accompanied by shifts in the use of their natural resources such as land. Household labour is also re-organised to meet these changes, and most importantly, the basic lifestyles of the village communities are transformed. These changes, which can be expected to be most prevalent in village communities close to the urban cores, are discussed in the next section of the Chapter. Some case studies in Melanesia are cited to illustrate points.

4.1.1 Evaluating change

The idea of "rural development" or "rural transformation" embodies a notion of adaptation to change. Adaptation to change occurs in response to a large number of factors including population growth, integration of rural dwellers into the cash economy through large resource development projects or other incentives for commercial crop production, and re-organisation of land tenure systems. Rural development and rural transformation are used interchangeably since both terms refer to the idea of change and progress. Sofer's (1987:1) study of a rural Fijian village points out that the main element of rural transformation in the community was an institutional change embodied within the re-organisation of land tenure rights from communal to individual ownership. In this connection, Morvaridi (1990:693) argues that there is a close relationship between cash crop production, new technology and the socio-economic transformation of small-scale farms, tending towards differentiation and individualisation. The driving force behind this change is the increasing intervention of the state in agriculture to promote commercialisation.

Commercialisation of agriculture can act as a transforming force where the application of land and labour has been altered from production of goods for direct consumption by their producers to production for domestic and international markets. A re-organisation of the household division of labour is often required to achieve this change. For example, commercialisation can intensify the work undertaken by females, although some variations do exist within the household according to age, family responsibilities and aspirations.

In the case of declining copra incomes of rural producers in the outer islands of eastern Fiji, Bayliss-Smith et al. (1988:184) observed that in Batiki, on average, every adult female spent at least 15 hours per week on handicraft production such as processing pandanus leaves and weaving them into mats. As Bayliss-Smith et al. (1988:184) note: "[i]t is a market which could provide a useful means for mobilising reserves of female labour and initiative that in the village setting are often under-employed". There is no doubt that this situation also exists in many parts of rural Melanesia where female labour is used to generate income to the household through means such as sewing clothes for sale.

In order to establish the extent of rural change in Melanesia, it is useful to carry out research in areas that were studied intensively at some stage in the past 10 to 20 years. Follow-up studies in rural Melanesia can provide useful information on the types of change a society, the economy and the environment have undergone over a specified time period. Overton (1987:143) outlines an example of this change with reference to different sizes in landholdings in 1954 and 1970 for Draubuta village in Fiji. Ward (1987) and Bayliss-Smith et al. (1988) examine processes of change in rural areas of Fiji with reference to specific periods defined by intensive field research in particular communities.

Sofer's (1987) study, which used and compared Belshaw's (1964) work with his own field inquiries, is another example of a study, through time, of change in a rural community. The focus of his study was to "trace the legacy of an induced rural transformation" by "turning village communal gardeners into individual commercially-oriented farmers cultivating both modern and traditional crops on their own blocks of land" (Sofer, 1987:1). The research entailed a comparative analysis of rural change during the colonial and post-colonial periods. An important point which needs to be stressed in such follow-up studies of societies in rural Melanesia is that the conclusions related to rural change are usually based on two cross-sectional surveys. One of these provides the baseline information which can be used to reconstruct the colonial or post-colonial economy of the rural communities undergoing study. The second survey provides information which can be compared with the baseline data in order to obtain an assessment of the nature and magnitude of change during the interviewing period. It is also possible to reconstruct the histories of certain kinds of development through the time period spanned by the baseline and follow-up surveys. This reconstruction is much more reliable if detailed baseline data for a particular community at some stage in the recent past are available.

Studies by Bayliss-Smith et al. (1988) of the colonial and post-colonial experiences of rural/regional development in the outer islands of eastern Fiji provide useful insights into rural change at a micro-level. Their case studies of villages on Batiki, Kabara and Koro within the Lau and Lomaiviti groups of eastern Fiji illustrate rural development problems and issues attributed in part to the relative locations of these three islands in relation to the main islands of Viti Levu and Vanua Levu. In addition, these islands are diverse in terms of their natural resource endowments which, in turn, have affected rural development efforts and the levels of rural prosperity. The villages that were selected for study represent deep contrasts in terms of geography and "hence [are] likely to encompass some of the variability in environments and life styles in eastern Fiji" (Bayliss-Smith et al., 1988:173).

The two case study areas of Mota Lava and Longana in Vanuatu also reflect diversity. They differ in their locations relative to the main urban cores, their physical geography, their colonial histories, and their contemporary population sizes and distributions. These areas were the bases for intensive research by other scholars during late 1979 and early 1980. Rodman's (1981) study of the customary land tenure system in Longana and Campbell's (1985) research on population-environment relations on Mota Lava provide the important baseline studies for this research. A follow-up study in 1991 seemed relevant given that there had been a decade of national development planning which aimed, among other things, to increase the prosperity of rural residents. Using baseline and follow-up survey information from micro-level rural village studies can assist in measuring the nature of change in rural communities in Melanesia. Such assessments may prove useful to both residents in the communities as well as to planners, especially if they are carried out by Melanesian scholars who have been raised in rural communities and who have some experience of village life in relatively isolated parts of the Western Pacific.

4.1.2 Using indices to measure changes

Various social and economic indicators have been used in post-colonial Vanuatu to measure levels of economic prosperity and welfare. These focus on population characteristics, labour force, health and nutrition, income distribution and other economic indicators. It is more difficult to find in the published statistics indices which measure socio-economic conditions prevalent at a community level, although census data can be used to generate changes in population size, structure and distribution.

At a micro-level it is possible to generate some indices through use of survey data. Indices such as per capita Local Government investment patterns, per capita copra and other cash-crop production levels, average household incomes and the presence of particular types of infrastructure can be useful indicators of capitalist development in village settings. They do not tell us anything about the deeper socio-psychological dimensions of "well-being", although an assumption is commonly made by development planners that the presence of money and infrastructure to support capitalist production and consumption is "good for people". It is appreciated that this view has been widely contested in the development literature for many years. However, as noted in Chapter One, it remains a prevailing view among Melanesian villagers.

Some information related to the socio-economic characteristics of households or village communities was made available by relevant government departments operating at sub-national and national levels. Quantitative data related to rural-urban mobility patterns and demographic characteristics of villages in both case study areas were collected through household surveys. These provided insights into changes in the village populations and economy. The survey also provided useful information on levels of annual household income from various sources, realised cash income, asset holdings and ownership of small-scale business enterprises. The indices give some conventional measures of household and village "prosperity" levels.

Quantitative data used to measure rural prosperity in this study is mainly derived from incomes from various cash-generating economic activities. An inventory of capital resources present in the household and the village was also included so that some measures of infrastructure could be obtained. It is in this context that Bayliss-Smith et al. (1988:208) suggest that health, housing, and social amenities present in the study areas should be considered and included in a search to measure prosperity and welfare levels of households. The use of an aggregate measure, such as "total energy income", which, according to Bayliss-Smith et al. (1988:208), is "the sum of subsistence-sector consumption and the perceived energy value of cash incomes", was not possible in this research. The baseline data for the two case study areas did not contain the detailed information required to calculate total energy income. However, household surveys around the time of independence in 1980 and in 1991, which included questions on the cash-earning activities of rural residents, provide sufficient information to assess critically some aspects of post-colonial rural change on Mota Lava and Longana.

4.2 Selection of field sites

In a review of some research strategies, Ley (1988:127) has pointed out that the

> participant observer's selection of a field area is invariably purposeful rather than random. An area is chosen either because it appears to fit a prescribed set of characteristics, or else because of pre-existing contacts with it.

The selection of field sites in Vanuatu was certainly purposeful. As noted earlier, I was interested in choosing two field locations where rural communities had been the subjects of socio-geographic and demographic research during the late

1970s and early 1980s. There were several alternatives including Ambae, Paama, Mota Lava and Tanna. Advice from planners in the National Planning and Statistics Office was helpful in deciding which of these to choose. Their interest in the research was stimulated, in part, by the relevance the findings might have for development planning strategies being considered for the third National Development Plan (DP3, 1992-1996).

The holding of national elections during the time of my field-work was also important. This is because the NPSO were familiar with political "events" that took place within the individual island groups of the Republic. The NPSO's knowledge of events that took place in the outer islands, together with my proposed research topic, finally resulted in the choice of Mota Lava in the Banks/Torres Group and East Ambae in the Ambae/Maewo Local Government Region.

4.2.1 Introduction to Mota Lava and the Longana area

Mota Lava is an island which can be regarded as peripheral to the main urban cores in Vanuatu. The economy of this island is oriented much more towards Luganville than to Port Vila. The distance from Luganville is about 230 kilometres. Rural communities living in the Banks/Torres Islands are so distant from the main centres in Vanuatu that it is common for them to be referred to as "away from Vanuatu proper" (Douglas, 1986:126). This makes the provision of basic social services, such as transport, very expensive.

The situation on Mota Lava is very similar to that found in the eastern islands of Fiji. This does not mean, however, that the experiences of rural change in the eastern islands of Fiji have been replicated in the outer islands of Vanuatu, given their differences in socio-political and colonial experiences. Rather, the development experiences and issues can be placed in the wider context of an "outer island" problem. These experiences are crucial since they help to develop a wider debate that concerns rural change and development in post-colonial Vanuatu and in Melanesia as a whole.

Longana in East Ambae represents a case study area that is located close to the urban area of Luganville. The total land area of Ambae is 399 square kilometres, while Mota Lava is only 30 square kilometres. The Regional Local Government headquarters for Ambae/Maewo is located at Lolowai. This makes the area more central in terms of decisions that relate to sub-national development planning within its own Local Government Region. Public infrastructure such as a Senior High School, which takes students from many parts of northern Vanuatu, a community school, an airstrip, a district health centre which also has one doctor, a police station, a vocational school, Torgil mission college, a centre for the Melanesian Brotherhood (an Anglican religious group) and a commercial centre (which houses a co-operative store and two small banking agencies) are all located around Longana and Lolowai in East Ambae.

Although these services are widely dispersed within and outside of the study area, Longana and Lolowai form a "central place" which performs many functions of small towns in rural Melanesia. The establishment of these services close to the rural population has contributed significantly towards creating greater awareness of the potentials for and advantages of rural development initiatives. Thus it is possible to suggest that many of these services, and particularly the trade stores and a commercial centre at Lolowai, have been very influential in promoting capitalist-style development in East Ambae. They have gradually encouraged expansion of aspirations in rural communities for Western goods.

Mota Lava and Longana represent quite different rural contexts in post-colonial Vanuatu in terms of their development potentials and constraints. The extent to which there has been change leading to greater rural prosperity in the two areas is examined in Chapters Five and Six of this thesis. The purpose of the next section of the Chapter is to outline the various reasons for selecting these two particular areas as sites for field research in 1991.

4.2.2 Selection of Nerenigman and Longana

After selecting Mota Lava and East Ambae I consulted the 1989 Census data on population and dwellings for the village communities to be included in my survey. Data on total resident populations and the number of households recorded in these Enumeration Areas were carefully studied. The idea was to select a village or group of villages which had between 40 to 60 households which could be included in a household survey. Statistically, this number would represent more than 50 percent of the total number of households in the Enumeration Areas (EAs) used to delimit my field site. Another reason for limiting the number of households to around 50 in each area was the time factor. A period of two months was available for research in each case study area. Field activities in small "hamlets" or villages that were widely dispersed, as in East Ambae, meant that it was difficult to survey more than 50 percent of the households in an Enumeration Area.

Nerenigman village on Mota Lava was chosen as my case study village while a group of hamlets in Longana of East Ambae became my second case study villages. Rural communities in these areas had been studied by Campbell (1985) and Rodman (1981) respectively. The information contained in their studies formed the basis for comparing post-colonial rural change and development in the two case study areas in question.

In addition to consulting the 1989 National Census, use of the National Archives and the NPSO library, both located in Port Vila, enabled me to collect other information relevant to the research topic. It was also a good opportunity to read widely about the country, particularly with specific reference to the islands where my research activities were to be conducted.

It was also important to develop contacts with the local people. Before commencing my field-work in the rural communities I contacted civil servants in Port Vila who came from East Ambae and Mota Lava. They suggested names of people to contact while in the study areas. I also made arrangements to meet staff from some government departments such as the NPSO, Department of Public Works, Department of Education and the Department of Local Government Councils.

The number of households recorded in the 1989 National Census in all the villages located on Mota Lava (including Ra as well) was 200 (Republic of Vanuatu, 1989). While there was a wide range in the number of households per settlement from 1 to 49, it was useful to concentrate on one particular village and investigate the aspects of socio-economic characteristics of the households in that village. Nerenigman village, which had 49 households and which is also a large village on the island in terms of resident population, became my case study village. My case study represented 21 percent of the total number of households on Mota Lava and Ra. At a village level, however, the study represented 86 percent of households in Nerenigman village. I interviewed 42 from a total of 49 households recorded during the 1989 National Census.

I considered it highly likely that there were no major differences in the detail of socio-economic characteristics present in the households of the neighbouring villages. An assumption was made to the effect that all the villages on Mota Lava and Ra islands were broadly similar so that the socio-economic characteristics prevalent within one of the larger villages can be used to reveal some general patterns of rural change during the post-colonial period. This impression came from the fact that differences were not obvious among villages in terms of infrastructure such as types of materials used for the construction of houses, and ownership and the availability of capital resources for development purposes.

The total number of households recorded in my second field location in Longana was 51 with a resident population of 253 people (Republic of Vanuatu, 1991). Out of this total, I interviewed 35 households. This number represented about 69 percent of the households in the study area.

Lists of the heads of households resident in the study areas were drawn up. This was done with the help of village elders and chiefs. In common with Forbes (1988:108) in Indonesia, "I was handed along a chain of contacts". This proved a very useful research strategy since in the initial stages of the field exercise, it was difficult to know who the heads of the household were and the villages they came from.

The listing of households present in the villages had a number of advantages.

a. It enabled me to obtain an up-to-date record of the total number of households in the study areas. With this list available, I was able to plan my timetable with regard to the number of households to interview during the period of field-work.

b. I could work out household absentees from the village at the time of the survey. This was particularly useful in situations where families had been away for a considerable period of time in Port Vila or Luganville.

c. The list was also used to cross-check names of heads of households in cases where families frequently commuted between villages. There were instances where a number of families staying in one village went to the neighbouring village to stay and then returned after a period of time. In order to decide whether or not to include these households in the sample, village of permanent residence was taken as a criterion, although no specific time period of absence was used.

d. The list helped me to screen individual persons and the particular household they came from. This avoided double recording.

4.2.3 The distribution of population and business activity

It is now useful to discuss the nature of the spatial distribution of rural populations and small-scale business enterprises in Mota Lava and Longana. These discussions set the scene for evaluating the experiences of post-colonial rural change. A point emphasised here is that development and expansion of small-scale business enterprises largely depends on a local market. Enterprises located in rural areas are used by village people to purchase basic consumer goods.

The spatial distribution of trade stores and resident populations on both islands differed. Statistical data related to copra production levels and records of transactions carried out by small-scale business enterprises had to be carefully examined in the context of this difference. The main catchment areas for the business enterprises could not be defined by clear-cut boundaries to allow for a reliable measure of the "total economy" in the study areas. It is, thus, possible to speculate that some consumer goods originating from small-scale business enterprises located in the study areas could have crossed district boundaries. This was a definite possibility in Longana. It was not a problem on Mota Lava given that the small island represented the effective market for most enterprises.

Eighty-eight percent of the resident population and almost all business enterprises located on Mota Lava, including Ra island as well, are concentrated at the south-western tip of the main island. Accessibility to most locations on the island is not difficult. The result was that the collection of quantitative data, which related to the island's exports of copra, and imports of consumer goods from Luganville and Port Vila by the small-scale business enterprises and the village co-operatives on Mota Lava (and Ra as well), were comprehensive enough to enable a measure of the island's cash economy.

In the case of Longana settlements are dispersed and the spatial spread of population is uneven. Ambae island has six council areas: East Ambae, Nduindui, North Ambae, North West Ambae, South Ambae and West Ambae. Although these council areas are regarded as separate administrative entities within the main Local Government Region of Ambae, the production of copra and cocoa by the producers, and the sale of consumer goods by commercial enterprises to the rural dwellers, are not hindered by boundaries between different council areas. In this connection, whatever quantitative data are available for measuring rural change in Longana are only relevant to the case study area and may not have any regional application. While these deficiencies are recognised it is likely, however, that people resident in the Longana area sold their copra and purchased Western-type goods from the main commercial outlets at Lolowai.

A significant problem in both case study areas was the unavailability of complete quantitative data on the sales and purchases of copra by village co-operatives and the middlemen on the islands. In a number of cases ambiguities were encountered where data relating to copra production were incomplete and patchy. Respondents claimed that data deficiencies arose because tropical cyclones in the past had destroyed co-operative society records. Other reasons given for the lack of complete records on total sales and purchases of copra were that small producers used other outlets, such as trading ships to sell their copra. This problem is discussed further in Chapter Five.

4.3 Methodologies

One of the most commonly adopted methods used in studying local communities is that of participant observation. Evans (1988:198) points out that the technique has remained ill-defined and that the "application of participant observation has led to the very questioning of the objectivity of the researcher, and ...the scientificity of social research". It is from this perspective that Forbes (1988:105) stated that "there is as yet no universally agreed-upon methodology within the socio-economic 'sciences'". This uncertainty also revolves around whether a universally accepted research methodology is possible at all.

Forbes (1988:105) suggests that both participant observation and surveys for collecting field data are useful in order to provide "some fall-back positions". Field observations and collecting quantitative data through structured interviews can improve the quality of data obtained in a particular research inquiry. The importance of including both techniques is emphasised by Newton (1985:15) who argues that detailed survey material needs to be balanced by qualitative material that has been generated through participant observation. This view has relevance for my field research experience in Vanuatu. Participant observation proved a useful research technique when information about basic lifestyles of the local people in the survey area was required. On the other hand, quantitative data on small business enterprises, rural-urban migration, and demographic and socio-economic characteristics of households were best obtained using a structured set of questions in a household survey.

While using a structured set of questions proved an invaluable research tool for collecting information for assessing rural change since the early 1980s, it is relevant to comment on the reliability of information collected from a viewpoint of a Melanesian geographer and a researcher in Melanesia. This, coupled with my familiarity of village life in Melanesia, raises a number of significant research issues with reference to responses to the questionnaires used.

An important issue is the question of conducting geographical research in a "foreign" place. Lasaqa (1973:305) has effectively pointed out that "any piece of research will be of value to the country and that some useful results will be forthcoming eventually". He goes on to suggest that research results should not be for external purposes only; relevance to the local inhabitants and decision-makers is also vital. Rural studies in Melanesia, for example, have to be formulated in this regard. Village people and planners at a subnational level in

Vanuatu expressed the view that they wished to see positive results emanate from the study, such as relevant information to use when planning for particular development needs of the rural communities.

This expectation was embodied in a common question villagers and government workers asked me: why had I chosen Vanuatu as my field location rather than my own society in Papua New Guinea? From a perspective of a rural villager in Melanesia, this question was important because it questioned the relevance of my study for the place and the village community. The question of how the data I collected could be best used for the overall benefit of rural villagers who became the subjects of my field inquiries was raised in this regard.

I indicated to respondents and to village communities that development issues I studied were no different from those prevalent in my own rural society in Papua New Guinea. Doing research in their villages gave me an opportunity to use my Melanesian heritage to understand better common problems of rural change. Experiences of rural change gained from this study would contribute towards interpreting the rural situation in Vanuatu and Melanesia in a wider context. Choosing Vanuatu as a site for field inquiries would also enable me to contribute to the debate about rural development in Melanesia from a wider comparative perspective.

It is also appropriate to reflect briefly on the reliability of information provided by my informants. During the household surveys on Mota Lava and in Longana it was evident that respondents were prepared to co-operate and openly discuss particular problems associated with development in their respective areas. Their willingness to discuss the development experiences of their communities with a stranger from another country was due to a number of factors. Given my status as a Melanesian, a Papua New Guinean and a fluent speaker of Pidgin English and Bislama, the villagers naturally regarded me as a "wantok" and not as a complete outsider.

The sort of research queries I was raising were no different from those I would raise in my own village environment in Papua New Guinea. The issues of gardening practices, customary land tenure and sources of household incomes are some of the examples. Discussing topics with which I was personally familiar as a villager contributed significantly towards strengthening the relationship between me and the villagers I was studying. Lasaqa (1973:302), reflecting on his own experience as a Fijian carrying out research on Guadalcanal in the Solomon Islands, captured the essence of the argument well when he noted that similar Melanesian heritages, and similarities in experiences of rural change, contributed to successful field research outcomes.

My own experience from a village setting in the Western Province of Papua New Guinea meant that I was able to assess whether responses to my questions in Vanuatu villages were reliable given that the villagers' lifestyles were similar to those experienced in many parts of rural Papua New Guinea. Given these similarities, villagers included in my survey were not hesitant when providing information on rural development issues in their own village communities. The villagers felt that comparing my own village experience with theirs on Mota Lava and in Longana area formed the basis for understanding particular rural development issues in Melanesia.

One problem with the use of questionnaires, which were administered over quite a lengthy period, was that villagers quickly became aware of the types of questions I was asking. This situation arose because the persons I interviewed previously had told other villagers of the types of questions/information I asked/sought from them. A second difficulty was that interviewing heads of households in the presence of other fellow villagers also affected responses. Input from the latter could influence the way the respondent reacted to my questions.

A third problem is that male heads of households in the study areas were my major informants. Responses from females were minimal. This attitude is basically entrenched in the role females play in overall household activities. In a Melanesian setting the head of the household (who is usually male although some cases it is possible for females to be the head) is regarded as the main decision-maker of a nuclear family. Information collected through a household survey regarding the daily activities of the family usually comes from the head of the household. In this regard responses received are likely to be male biased with little input from the female respondents. This ambiguity was inherent during surveys on Mota Lava and in the Longana area.

Finally, there is some ambiguity with regard to the reliability of my quantitative data collected on household incomes earned from various sources over the six months before interview in 1991. Respondents often had to "guess" the amounts generated. There were no written records. This problem prevailed for two main reasons. In the first place, apart from small-scale business operators, village farmers did not keep detailed records of sales of their products. This was further compounded by the fact that a period of six months was rather a long one for recalling clearly the volumes of copra sold and the amount earned. The tendency was for total revenue generated from the sale of various products to be estimates. It was possible that values entered in the questionnaires could have been well above or below the average income over the last six months in 1991. Secondly, in the case of small-scale business operators, total income generated could have been underestimated for fear of taxation by the regional authorities. This fear was prevalent in 1991; for example, one respondent, an elder in a village in the Longana area, refused to give the total value of each capital item he owned which was used for various development purposes and what the source of funding was.

4.3.1 Research instruments

Several questionnaires were used to collect information on demographic and socio-economic characteristics of individual households in Nerenigman village on Mota Lava and some villages in Longana of East Ambae. Attitude surveys involved informal interviews with local people and the civil servants working on the islands. These discussions reviewed the sorts of socio-economic changes that they had seen take place in their own communities since independence in 1980. Asking respondents about rural change within their own communities was appropriate. This was because the respondents were familiar with development activities which took place in their own communities; they were part of the process of rural change. The respondents were also asked to rank-order suitable small-scale projects to be implemented in their community from which a majority of rural people could benefit.

Despite the criticism that "household, village and regional studies are exposed to the dangers of extrapolating trends and generalizations over wide areas from case study evidence" (Siddle and Swindell, 1990:1), this research has adopted the premise that "the central value of micro-scale study is that the processes at the level of the actor or actor-household and the external forces operating in that household may be examined and established and not simply assumed" (Brookfield, 1985:172 cited in Crittenden and Lea, 1990:80).

It was necessary at an outset to define the term "household". A household was defined as "a group of people who usually ate together and slept in the same house. Their food was usually prepared from the same kitchen and bought from the same budget" (Republic of Vanuatu, 1991:57). This definition was also used during the 1989 National Census of Population and Dwellings. In most cases a household on Mota Lava and in Longana included the extended family composed of a head of household, a spouse, children and the parents. The mean size of households in both areas in 1989 was about five members, rising with the age of the head and reflecting the accumulation of his own children and extended family members as the household passed through the various stages of the life cycle.

Decisions about labour allocation and the disposal of income are not taken in isolation by individuals. They usually take into account the aggregate of resources at the household's command and the collective needs of this unit (Heath, 1981). A second reason for focussing on the household relates to the allocation of the principal resources for rural development, land and labour, in order to maximise household consumption and to maintain the reproduction of family labour. The household is both a producing and consuming agent, and most productive activity is undertaken by its members (House, 1991).

A principal objective in most Melanesian rural households is to maintain a degree of self-sufficiency in basic food by production for family use, while at the same time producing for the market and selling some household labour time. Selling labour time was not particularly significant on Mota Lava or in Longana. When households sold their labour, revenue generated was only minimal. Most labour in the village was used as "labour in kind" for which payment was primarily made in terms of cooked food. In other cases, reciprocal arrangements were often made to cover work such as cutting copra or preparation of gardens.

While the use of participant observation and household surveys proved useful research techniques for collecting both qualitative and quantitative data, certain problems with reference to questionnaire design need some mention. The next section of the Chapter outlines various flaws with the research design used in this study. Reasons for these deficiencies are also cited.

4.3.2 Comments on the questionnaires

Before field research in Vanuatu commenced, six different forms were designed to collect information related to the basic socio-economic and demographic characteristics of households in the study areas. Five of these schedules were used in the field. The sixth questionnaire, which looked at coastal fishing, was left out of the survey. This was because no local people or village organisations were involved in fishing as a commercial enterprise. Fishing and collection of live marine organisms by some households was oriented towards meeting subsistence requirements rather than for commercial purposes.

The questionnaires were designed with the wider objective of investigating aspects of the cash-generating economic activities of the households. A number of relevant interview schedules used by other researchers on population mobility in the outer islands of Vanuatu, such as Haberkorn (1987), also assisted in formulating my own research designs. Consultation of the 1989 National Census schedules was also useful. This allowed for some consistency between data collected during the 1989 National Census and my own field data collected in 1991. This was necessary in order to make some assessments of changes in populations and dwellings between 1989 and 1991.

Questionnaires which were used in the field included a household schedule; a village resource inventory; a survey of rural-urban mobility; a perception and opinion survey; and a trade store survey. The types of information collected using the questionnaires are summarised in Table 4.1, and detailed more specifically with reference to each survey instrument.

Table 4.1: Summary of information included in the five questionnaires

Name of form and information type collected

1. Household schedule

Part A: Demographic details
- * household members and relationship to HH
- * age/sex/marital status
- * home village/island
- * educational levels attained/current activity
- * list of absentees, date left, date of last visit and listed remittances made to home village

Part B: Economic characteristics
* information on physical characteristic of landuse
* cash-generating economic activities

Part C: Information on coconut plantations and cash crops

Part D: Livestock

Part E: General questions on "development" assistance received from various government and non-government organisations

2. Village capital resources inventory
   * item, number owned and name of owner
   * ownership type
   * initial capital injection and source of funding
   * type of operation performed

3. Rural-urban mobility
   * number of moves made
   * where and when
   * duration
   * reason for travel
   * where stayed
   * travelled alone/ with someone else
   * mode of transport/cost of travel
   * took presents and what were they
   * when returned to village, what did the person bring back to the village
   * how was the cost covered

4. Opinion and perception survey
   * list of projects in the village and when implemented
   * assistance received from various organisations such as churches, Local Government Councils, Department of Co-operatives, DALH extension staff, Rural Development Bank and any other
   * list most important project in the village
   * list least important project in the village

5. Trade store survey
   * name of trade store owner
   * list of items sold, number and cost of each different item on self
   * initial capital injection
   * sources of funding
   * reason(s) for establishment
   * problems related to store's operation
   * sources of supply of store goods
   * mode of transport for shipment of store goods
   * cost of transport (freight rates)
   * most important consumer and non-consumer goods purchased from the store
   * area served by the store

Note: The full questionnaires are in Appendix I.

1. Household schedule: This included basic demographic details of a household. Ages of the head of household and dependents were recorded from birth cards supplied by churches. These cards were usually held by a household. In the absence of proper birth cards, the birth dates of younger children were usually recorded on the first or a back page of a Bible. Ages of older people staying in a household were sometimes difficult to estimate. When they gave their age, there was a tendency to overstate. In the case of the last census enumeration in Vanuatu, "years of birth ending with the digit 0 have been reported much more frequently than those ending with other digits" (Booth and Qualao, 1989:25). However, the number of old people who did not know their ages was rather small since most people could recall their birth dates. This was due to the long exposure to mission work in these villages. Most of the old people had been baptised in the past.

The household schedule also included information on the level of education attained by the members of the household. Educational attainment of the household head appeared to be strategic in a number of ways. Education was associated with involvement in cash-generating economic activities and some interest in improved farm management practices. It also facilitated access to other formal employment, the earnings from which can be partly used to promote family enterprises. This is particularly relevant where individual male heads of a household had left to work in either private or government employment in Port Vila and Luganville and other district centres in Vanuatu. Some of the income that was received from this formal employment was remitted back to the relatives who then invested it in small business enterprises such as the trade stores.

Educational levels attained by younger and middle-aged persons were recorded with some accuracy since they could recall the highest level reached before they left school. On the other hand, the older people did not exactly know the level of education they had completed. This was particularly noticeable for those respondents who had attended a mission school. There were difficulties in comparing the old mission school levels of attainment against the present Anglophone and Francophone levels. If the respondents and other dependents in a household had completed some "formal" education, the details were noted on the form. However, the answer "none" was entered for those persons who had not had any formal education. The proportion of village residents who had completed formal education declined with age.

Data on income generating activities of a household was an essential requirement for this study. Virtually all households depended on copra as one source of cash. Despite low prices for various grades of copra, some members of the household continued to produce it to meet the cost of children's school fees, medical fees, council taxes, church contributions and also to pay for basic consumer goods from the stores. Kerosene, soap, matches, sugar and stick tobacco were the main items purchased in the local stores.

The copra production levels varied among different households and the total volume produced was usually given by the number of bags produced at any one time. This was because the respondents had difficulty recalling the exact amount received per bag. The aggregate income generated from the sale of copra in the form of bags of copra was calculated using the number of bags produced by the household.

Copra production was not the dominant source of cash income for some households in the study villages. The sale of kava roots, livestock (pigs, cattle and chickens), garden food crops (including fruits and nuts), fish and live marine organisms, and handicrafts and hire of labour were some of the sources of additional income for households. Income that was generated from these sources varied in the village communities that were studied.

The nature of garden activities was difficult to specify. On average more than one garden was cultivated and each household's land under cultivation was highly fragmented. Deciding whether to categorise different food crops as either "cash" crops or "food" crops in the questionnaire raised some definitional problems. The difficulty of defining subsistence agriculture was also encountered during the 1967 Population Census (Republic of Vanuatu, 1986). The system of agriculture practiced in the island communities was one where food crops were grown both to meet subsistence requirements or for sale in the local markets to generate cash income. In some cases crops were grown with the intention of meeting both requirements. It is in this context that Barbier (1989:880) argues that there is no clear cut difference between "cash crops" and "food crops".

While there is some ambiguity in defining these two terms, Maxwell and Fernando (1989:1678) give four different definitions for cash crops: marketed surplus, nonstaple agriculture, nonfood agriculture and export agriculture. In all cases, the term "crop" includes both livestock and forest products. In the context of my study, a cash crop was defined as a crop that was sold for cash. At a household level, it referred to marketed surpluses, the equivalent of Maxwell and Fernando's (1989) first category. Food crops were all produced for household consumption.

All respondents were able to state fairly unequivocally the number of pigs, cattle, chickens and other types of livestock owned by their household. There were various reasons for owning animals, such as for fresh meat supply to the household or for sale of any surplus meat products in the village. Some stock units were also slaughtered or traded between fellow villagers to meet social requirements such as church celebrations, payment of bride price or as a contribution towards funeral feasts for which reciprocal arrangements were established.

2. **Village capital resources inventory:** Information relating to the capital resources present in the survey villages was collected. A capital resource in the context of this study was defined as any kind of physical infrastructure or equipment used by the villagers in various forms of household activity which

cost at least 10,000 vatu when first purchased. Other household items such as coleman lamps, sewing machines and fishing nets were also included on the list. Villagers hired out some of these items for generating cash. This was particularly prevalent in the case of sewing machines, fishing nets and clothes such as suits and bridal veils. This informal activity generated some additional revenue for a household, but the amounts were small.

Other types of capital resources used by the household as a means of gaining income included bread ovens, outboard motors, dinghies, and equipment used for copra processing and related activities. Assets, such as bread ovens, were located in the villages and it was possible to count them all. Equipment or plants used for copra production activities were also located on blocks of land where the households produced copra. It was not difficult to make an inventory of the numbers of these in the study areas. The information on household or village assets, amenities and utilities are considered reliable enough for evaluating aspects of change in the village economies during the 1980s.

3. **Rural-urban mobility**: Adults (males and females) who were over the age of 20 years and made moves for over one week away from the village after January 1990 were asked questions on their mobility behaviour. However, this survey was limited in that it was not carried out in Santo or Luganville where migrants from both case study areas were located. The second problem with this kind of mobility information is that it is difficult for respondents to recall all the places visited in the last 12 months. These data are liable to be relatively unreliable and really only give a broad indication of mobility patterns (Chapman and Prothero, 1985).

The individual respondents were initially identified during the household census. It was interesting to note that the respondents in both study areas were making moves more commonly to Luganville than Port Vila. During the 12 month period, an average of one move outside the island was recorded for each respondent on Mota Lava and two for the villagers in the Longana area. There were various motives for these moves such as medical reasons, visiting families, attending marriage ceremonies, attending court, taking part in independence celebrations and participating in church, sports and political party congresses. Respondents in Longana also made reference to travelling to Luganville to sell kava and to place orders for building material for the construction of their own houses. Most of these moves involved absences of less than two weeks.

4. **Opinion and perception survey:** Since the main focus of the thesis is to explore the experiences of rural change in post-colonial Vanuatu, it was necessary to ask respondents about the sorts of development activities they had seen take place since independence in 1980. Respondents included adult persons across all age groups. The evidence suggested that older people were able to make better comparisons of the types of development they had seen take place before and after independence. On the other hand, respondents in the younger age groups were more familiar with what had taken place since 1980 given that the changes affected their lives directly.

This questionnaire was also designed to ask respondents about the type of assistance the village communities had received from both government and non-government organisations. Some of this information was collected from the capital resources inventory which also included details about assets (bread ovens and copra driers), amenities (community halls) and utilities (water supply projects).

5. **Trade store survey:** Out of a total of 17 small trade stores registered on Mota Lava and Ra, I was able to study eight stores in detail. This represented about 47 percent. I chose one or two from each village. The idea was to compare their sources of funding and their role in commercial activity at a village level. It was also possible to calculate total capital held in stock at the time of the survey.

There were five stores in the villages which were included in my study area in Longana as well as a considerable number in close proximity at Lolowai and Wailengi. I did not include the five stores in my survey because they were widely spread out in the study area. Despite the lack of detailed information on their operation it was quite apparent that the small stores resembled those on Mota Lava, both in terms of the variety of goods they traded and the sources of funding sought for their initial establishment (Field survey notes, Longana area, 1991).

Two general problems emerged with the use of all the questionnaires in the field. Firstly, the questionnaires were not pre-tested in a Melanesian village context before their actual use on the field. Pre-testing of the questionnaires was carried out in Vila among ni-Vanuatu clerical staff. This did not replicate adequately the village setting and, in order to ensure that the questionnaires elicited reliable responses, they were revised in the field to reflect better the context in which the questions were being asked.

The second problem with the questionnaires was that they were too long. While each schedule varied in length, the total interview time for all five schedules was three hours. Given such lengthy interviews, I was aware of the fact that some respondents could loose interest in answering questions and this could affect the reliability of the data. Given this problem only two household interviews could be completed each day. In between these interviews some time was devoted to informal discussion focused particularly on the respondent's perceptions of "development" and the sort of rural change the village communities had experienced during the post-colonial period. Reference was also made to the nature of rural development before independence in 1980. All interviews were conducted in Bislama and since all respondents spoke this language an interpreter was not required.

4.4 Conclusion

This Chapter has reviewed the research methods adopted to obtain information on aspects of rural change in Vanuatu since independence. The approach to measuring change involves using a baseline study around 1980 to define conditions in villages at the time of independence and comparing these conditions with those found a decade later when the villages were re-studied. The process whereby field sites were selected was discussed, and characteristics of the two chosen areas were outlined. Data collection procedures were described and evaluated. Chapters Five and Six examine the experiences of rural transformation in Mota Lava and Longana.

CHAPTER FIVE

PRODUCTION AND VILLAGE ECONOMY ON MOTA LAVA AND LONGANA IN 1980 AND 1991

An assessment of economic change in two rural areas in the context of development planning during the first decade of political independence is particularly relevant given that a national objective of "balanced" development in different parts of the archipelago received considerable attention in the two post-colonial development plans (DP1,1982-1986 and DP2, 1987-1991). Rural change cannot be studied with reference solely to development since 1980 because the legacy of a colonial history of a dual administration has continued to have an impact on economic trends in the different island communities of Vanuatu. The structures of village economies in 1980 and 1991 in Longana and Mota Lava are examined in this Chapter. An introduction to environment, resources and population in these areas is also presented. Development infrastructure such as social services, transport provision, commercial enterprises and the institutional arrangements for supporting rural change are examined in Chapter Six.

5.1 Environment, resources and population

To set the scene for the discussion of village economies during the 1980s, the Chapter begins with a description, at the island level, of the relative locations of Mota Lava and Ambae, their natural resource endowments, population characteristics and settlement patterns. The specific details related to settlement morphology of the case study areas are presented at a village level in section 5.1.3 of the Chapter.

The locations of Mota Lava and Ambae are shown in Figure 5.1. Factors related to geographical location such as isolation from major urban areas, fragmentation of land into dispersed islands, and small peripheral landmasses on the fringes of

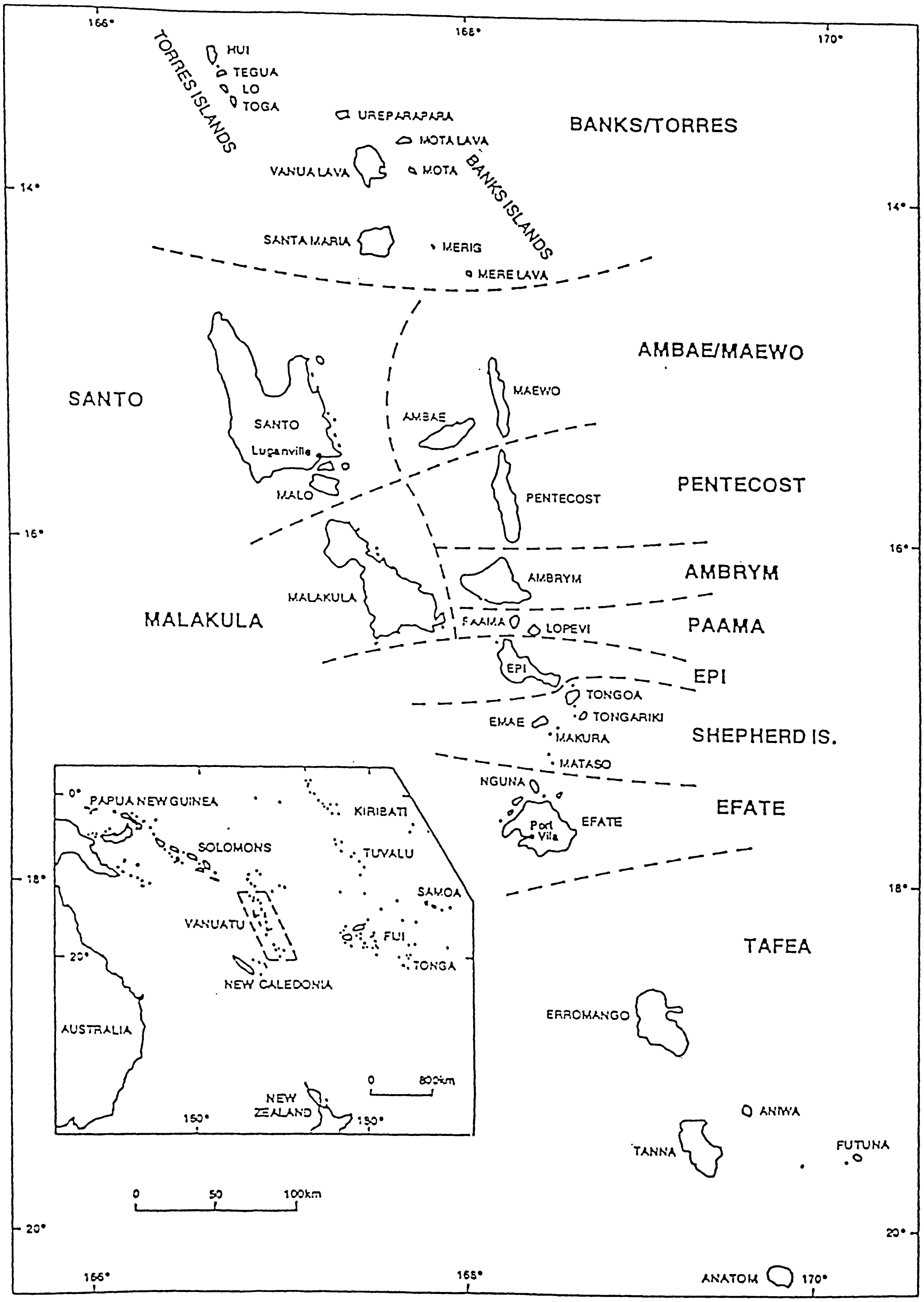


Figure 5.1 : Vanuatu - Local Government Regions and islands

island archipelagoes, can create particular problems which inhibit rural progress in the outer islands. Some difficulties which arise from geographical isolation, fragmentation and smallness in Melanesia have already been noted in previous Chapters.

Mota Lava is located in the northern part of the archipelago (Figure 5.1). The island is small with a total land area of 30 square kilometres. It is geographically isolated from the two main urban cores of Port Vila and Luganville. The movement of goods and people to these towns is by air and sea. Mota Lava has other neighbouring islands within the region. For example, Vanua Lava and Mota are some 12 kilometres away to the south-east and east respectively. Due to the absence of airstrips on some of these islands, movement between them is confined to sea travel. Residents in the Banks Islands tend to be clustered in small villages mostly with populations of less than 300.

The second case study area is Longana located on the south-east coast of Ambae (Figure 5.1). Ambae differs from Mota Lava in a number of ways. Population distribution, settlement patterns and the number of households in each village vary. They are different in the sense that on Ambae residents live in dispersed settlements and the island is also bigger. The spatial distribution of settlements and population makes the provision of basic social services on the island difficult. However, the island's proximity to Luganville has a positive influence on the rural dwellers' opportunities to participate in the cash economy (Figure 5.1). The island's population is also well served by airstrips, including one in the Longana area.

5.1.1 Natural resource endowments

A resource that has significant use value to the rural dwellers on Mota Lava and Ambae is the natural vegetation. Forests provide wild and domesticated fruits and nuts of different varieties. This part of the physical environment also provides fuel wood and building materials for the local population. Wild sago leaves *natangura* (Bislama) (*Metroxylon warburgii*) for thatch, bamboo for walling, and lianas for baskets and rope-making are harvested from the forest. Medicines and poisons to stun fish also come from the different types of plants found in the forest.

As on Ambae, the central part of Mota Lava is predominantly primary forest. Elsewhere on the lower slopes, the vegetation type tends to be a mixture of secondary forest, cultivated food plants and, in some areas, planted coconuts. Dominant plants found on the lower slopes are tree ferns, pandanus, bamboos and wild sago stands. There is also a wide variety of fruits and nuts, most of them edible. Breadfruit, *navel* (Bislama) (*Barringtonia edulis*) and *nandae* (Bislama) (*Myristica fatua*) are some of the examples.

Many parts of Ambae are covered with tropical rainforest. The plateau area of the island is dominated by primary forest with little or no understorey. The ridges of the island are covered with secondary vegetation. The cleared ground of the lower slopes consists mainly of wild cane grass, wild sago palm, bamboo and a variety of xerophytes. Banyan or ficus tree and various hardwoods are very common too. The hanging roots of the banyan tree provide a good source of rafters for constructing houses. As on Mota Lava, these resources provide useful material for building houses in the villages.

On both Mota Lava and Ambae, areas where local villagers have cultivated gardens or left the land to fallow are usually dominated by a regrowth of soft wood and other subsistence food crops. Some of the food crops which grow in the old garden sites include taro, pawpaw, breadfruit, bananas and cassava. Citrus and other edible fruit and nut trees are very common plants as well. These fruit and nut trees are typical undergrowth in old coconut plantations, which are still used to produce copra despite the age of the palms.

Wild animals, such as pigs and bush fowl, are also hunted by local residents in the case study areas. This is particularly prevalent in the case of Longana. There is an abundant supply of these animals in the forest, although in Longana they were not frequently hunted since most households in the villages also raised pigs and chickens. Some local villagers hunted them during their leisure time. The majority, however, preferred domesticated animals.

Other types of food resources consumed by rural households come from the sea. These include fish, crustaceans (lobsters and coconut crabs) and other live marine organisms. The harvest of these resources from the sea is more pronounced on Mota Lava than it is in Longana. This is because the rough and steep coastline in the area does not make fishing, collection of live marine organisms and valuable *troka* shells (*Trochus niloticus*) a viable household activity. In Longana fishing is not important because traditional owners of the coastline control access to the fishing grounds. Each land-owner in Longana has a land boundary which defines areas within which the customary rights and access to harvesting food resources from the sea or the land are exercised.

Access to use of valuable natural resources, either for household consumption or for sale to generate cash income by individual households, can be arranged with the land-owner. This arrangement establishes and strengthens social relations between different households in the villages which are expected to be reciprocated later. It is in this context that Rodman (1987) specifies in her study that individual persons can have *access* to the use of land belonging to other people but they do not *control* the resources that grow on that land.

Thus resources from both the forest and sea are regarded as important components of a household's livelihood. These resources meet subsistence requirements and provide a potential source of revenue generation. The importance of these resources in the daily lives of the rural households in the case study villages is discussed further in section 5.2.1 of this Chapter. The next section outlines some features of population distribution and settlement patterns.

5.1.2 Population distribution and settlement patterns

Mota Lava

It will be recalled from Chapter 4 that Nerenigman village was not too different in terms of socio-economic characteristics from the neighbouring villages on Mota Lava and on the island of Ra. Nerenigman is a relatively large village in terms of population when compared with other settlements located on the south-western tip of the island. In 1989, this village had a total resident population of 282, representing 23.7 percent of the total population of Mota Lava and Ra. The village had 49 households registered during the same Census (Table 5.1). This accounted for 24.5 percent of the households on both islands. Other large villages in terms of number of households and total resident population include Var and Totoglag (Figure 5.2).

A comparison of population enumerated in the 1967, 1979 and 1989 National Censuses shows that there were significant increases in the size of island's resident population between 1967 and 1979 and a virtually "static" population since 1979. When Ra island is excluded, the population of Mota Lava in 1967 was 684, by 1979 it was 1,000 and in 1989 it was 1,047 (Table 5.1). The populations and households in each of the villages in 1979 and 1989 are shown in Table 5.1.

It is clear from data presented above that the population of the island has not changed much during the 1980s. Between 1979 and 1989, a total of 14 people or 1.2 percent had been added to the resident population of Mota Lava and Ra island. On the other hand, the total number of households had dropped by 12 (6 percent). My field data do not provide sufficient information to determine the magnitude of this out-migration over a 10 year period. Furthermore, the 1989 Census figures on Population and Dwellings are inadequate for determining the extent of this migration on the basis of individual islands in Vanuatu. The published data are available only at the level of Local Government Regions.

Table 5.1: Population of villages on Mota Lava and Ra island, 1979 and 1989

Village	No. of HHs. (1979)	%	Total pop.	%	No. of HHs. (1989)	%	Total pop.	%
Var[a]	42	19.8	243	20.7	35	17.5	205	17.2
Totoglag	43	20.3	232	19.7	33	16.5	226	19.0
Qweyemagnde	26	12.3	154	13.1	27	13.5	155	13.0
Wovet	10	4.7	51	4.3	7	3.5	41	3.4
Nerenigman	55	25.9	292	24.9	49	24.5	282	23.7
Telhei[b]	-	-	-	-	4	2.0	17	1.4
Ra	29	13.7	171	14.6	27	13.5	142	11.9
Telvit	3	1.4	19	1.6	7	3.5	47	4.0
Valuwa	4	1.9	13	1.1	6	3.0	54	4.5
Telgaye	-	-	-	-	4	2.0	13	1.1
Demsas	-	-	-	-	1	0.5	7	0.6
Total:	212	100.0	1175	100.0	200	100.0	1189	100.0

Note: [a] A small hamlet of Amwoyug with one household (2 males and 2 females) was counted as one with Var (Avar) village in 1979. However, in the 1989 National Census there were no households listed in this hamlet.
[b] This is an Anglophone school and was included with Nerenigman village in the 1979 Census.

Source: Republic of Vanuatu (1979, 1991)

The 1979 and the 1989 National Census listings indicated a decline of 15 percent (15 households) in all five villages located on the south-western tip of the island, while the villages located on the eastern tip had gained by 68 percent (15 households) (Table 5.1). This trend indicates that there has been population movement to Telvit, Valua, Demsas and Telgaye which offer a local outlet for densely settled western Mota Lava. This suggestion is also confirmed by evidence of three new villages already established on the island. For instance Demsas and Telgaye were not listed as villages in the 1979 National Census. In 1989, 7 people (one household) resided in Demsas village and 13 people (4 households) in Telgaye. These settlements have only recently been established. These locations are recipients of some families who moved away from south-western Mota Lava.

It is possible that during the 1980s newly formed households were establishing new settlements. The other reason for the decline in households in the south-west of the island is migration of married families for employment reasons to other places in the archipelago especially the towns of Luganville and Port Vila. For example, a count of absentees from nuclear families in Nerenigman village in 1991 revealed that a total of 3 households left the island in 1989. Heads of these households are government employees in Port Vila and Luganville. One works in Port Vila and the other two work in Luganville.

In 1989 Mota Lava's population density was 34.9 persons per square kilometre. The spatial distribution of this population was uneven, with 88 percent concentrated in the south-west of the island. Of the total of 10 villages on the island, 6 were located in this area. The land here is flat and suitably located in relation to the strong south east trades. The reef which extends around Ra linking the small islet to the peninsular is a barrier reef. This barrier reef reduces the strength of waves created by the south east trades. The distribution of villages on the island is shown in Figure 5.2.

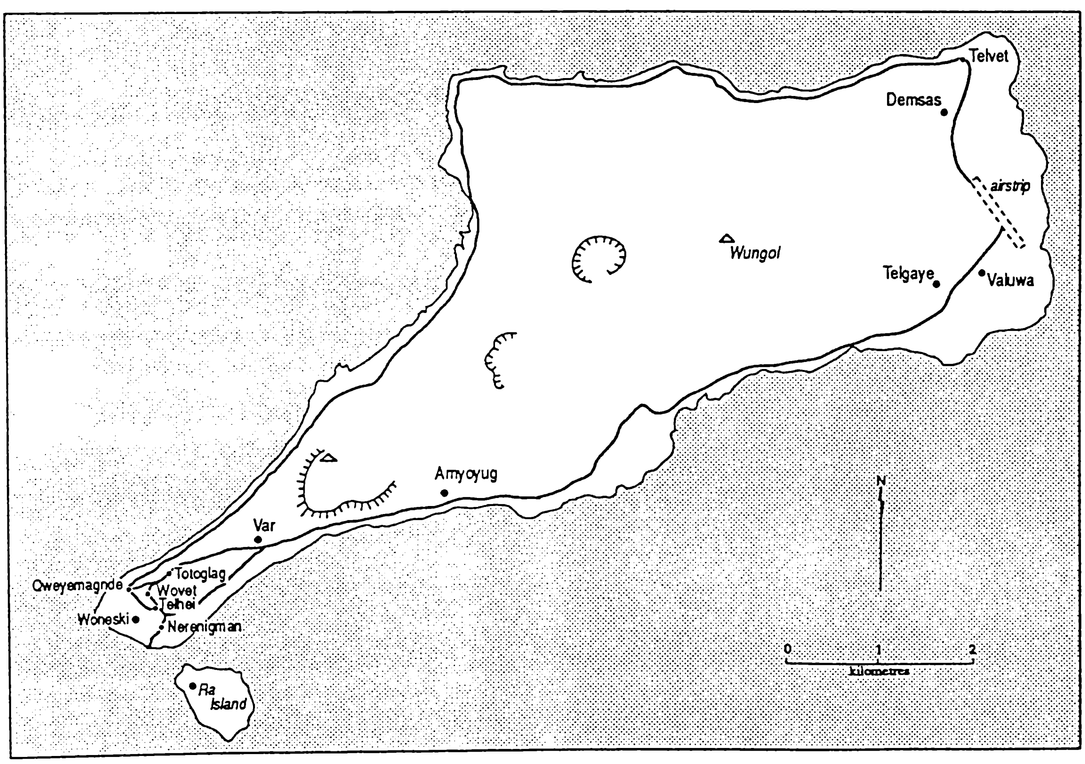


Figure 5.2 : Mota Lava and Ra island - location of villages

Some changes in village populations on Mota Lava were observed during the field studies in 1991. For example, one household moved to revive an old settlement called Amwoyug located four kilometres away from the south-western tip of the island (Figure 5.2). It is apparent from the 1979 and 1989 census data that this household had shifted its place of residence more than once to Amwoyug. The reason for making this suggestion is that in 1979 one household with four members was listed in Amwoyug, while in 1989 no households were recorded residing in this hamlet. However, during the field studies in 1991 this household had moved back again to settle in this hamlet.

This hamlet is likely to become a permanent village for some households in the near future for a number of factors. These include the very high population density already experienced in and around Nerenigman village. Secondly, the emergence of this settlement is due to the large amount of time spent by villagers travelling considerable distances to visit garden sites located at various places on the island. This is especially so, given the decline of motorised transport on the island. Thirdly, land holdings which households use for subsistence and commercial farming commonly are fragmented. In 1991 all three factors were evident and the need for households to relocate their places of residence on the island has to be interpreted in this context.

Many villagers on the island also travel for an hour or more to cut fuelwood for household use and to make new gardens. Wild sago leaves used as roofing material on most village houses were also brought from distant places on the island. This suggested that resources in close proximity to the villages were already extensively utilised or harvested.

Ambae

While Mota Lava has a small land area, small resident population and high population density, the situation on Ambae is different. Ambae is 38 kilometres long from east to west and, at its broadest point in the centre, is 15 kilometres wide from north to south. The highest point on the island is about 1,496 metres above sea level. On the summit of the island are located three volcanic lakes; Manaro Ngoru, Vui and Manaro Lakua. This summit also forms a plateau which gradually drops off to the coastline on the western, southern and eastern sides but rather steeply on the northern side of the island. To some extent this has determined the spatial distribution of Ambae's resident population which is confined largely to the low-lying coastal areas. Most of the dense settlements are found below an altitude of 560 metres (Figure 5.3). The interior of the island, however, is almost uninhabited, a phenomenon linked to the physical geography of the island.

The island's settlements are heavily concentrated around Walaha and Nduindui to the south-west of the island. These settlements consist of scattered hamlets which local people term villages. Most of these settlements are composed of a small number of households. Due to the dispersed distribution of households it was necessary to amalgamate clusters in order to establish suitable Enumeration Areas (EA) with around 60 households each in the 1989 Census. This situation is attributed to the fact that "three quarters of all Vanuatu settlements have less than 50 residents" (Haberkorn, 1989:32). A typical village on Ambae may comprise two or three households with a communal house (*nakamal*) frequently used as a focal point for village congregation. Activities in the *nakamal* range from drinking kava by adult males to important village meetings and hosting village feasts.

While the household survey on Mota Lava concentrated on residents in one large village only, the study in Longana covered a number of small hamlets or villages that made up one main Enumeration Area (Figure 5.4).

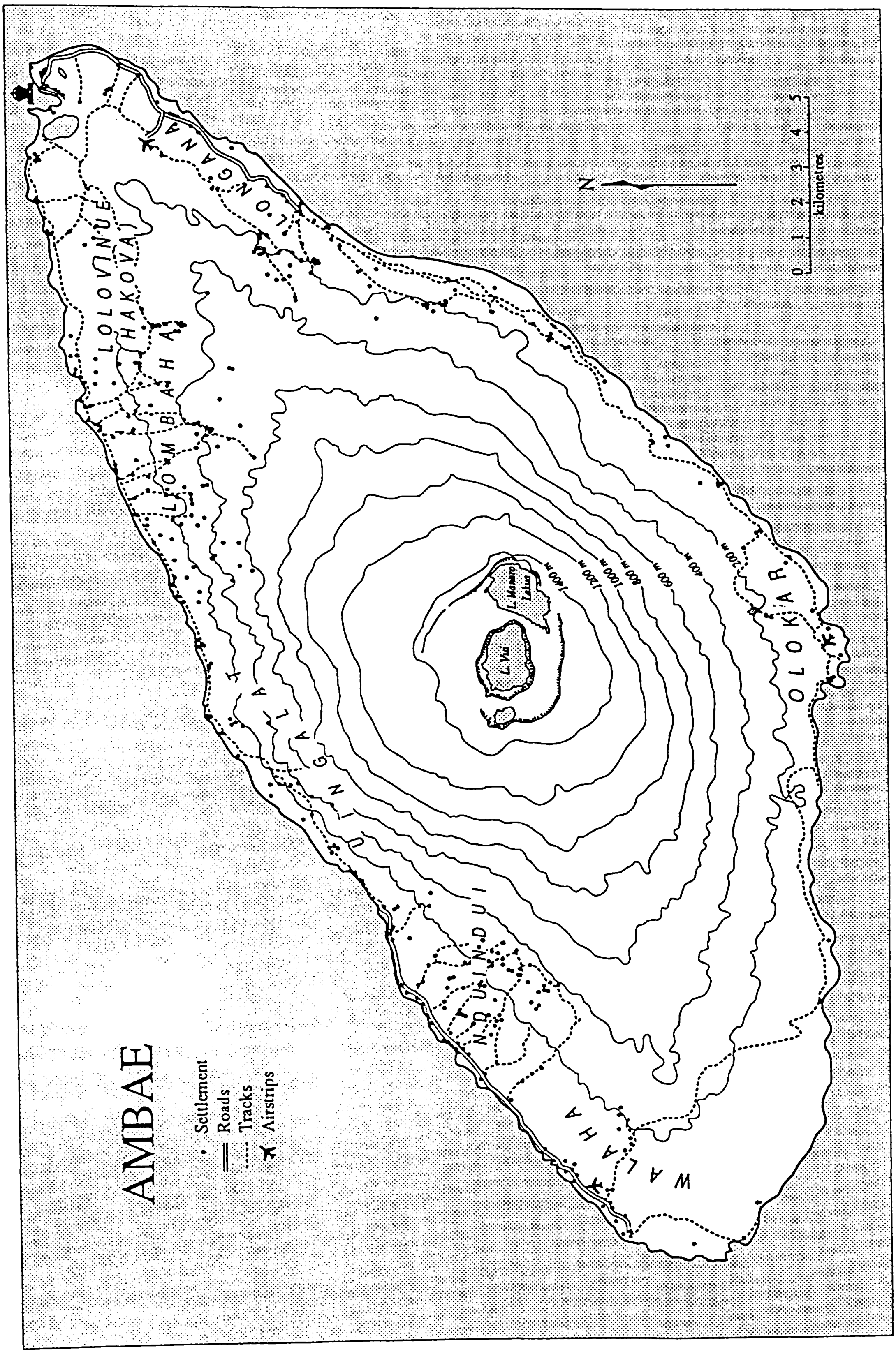


Figure 5.3 : Distribution of villages on Ambae

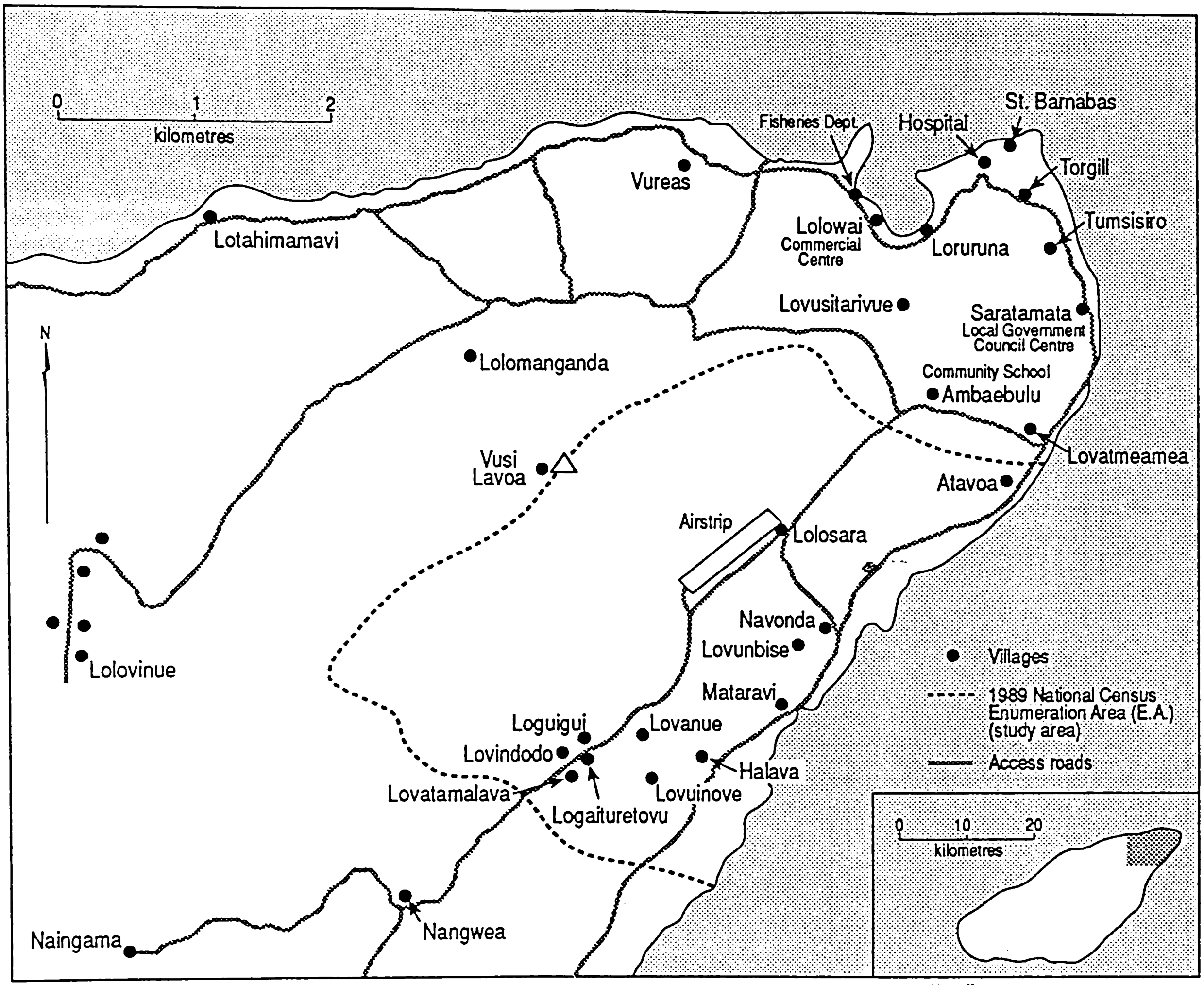


Figure 5.4 : The case study area in Longana

The total number of households recorded in the study area during the 1989 National Census was 51 with a resident population of 253 people (Republic of Vanuatu, 1991). Out of this total, 34 households were included in the survey. This number represented 66 percent of the households in the Enumeration Area. The numbers of households and population concentrations in each village are summarised in Table 5.2.

Table 5.2: Population of villages in the case study area of Longana, 1979 and 1989

Village	No. of HHs. (1979)	%	Total pop.	%	No. of HHs. (1989)	%	Total pop.	%
Atavoa	7	7.6	42	9.4	8	15.7	41	16.2
Navonda[a]	52	56.5	260	58.0	24	47.1	124	49.0
Tangavu	3	3.3	10	2.2	-	-	-	-
Lovunbise	9	9.7	38	8.5	-	-	-	-
Kamali Mbakeo	1	1.1	6	1.3	-	-	-	-
Barnabas stn.	1	1.1	8	1.8	-	-	-	-
Lolosara[b]	2	2.2	11	2.5	2	3.9	6	2.4
Mataravi	3	3.3	11	2.5	3	5.9	16	6.3
Halava	3	3.3	8	1.8	3	5.9	16	6.3
Logaituretovu	4	4.3	15	3.3	3	5.9	13	5.1
Loguigui	2	2.2	9	2.0	1	1.9	8	3.2
Lovuindodo	3	3.3	16	3.6	3	5.9	6	2.4
Lovatumalava	2	2.2	14	3.1	1	1.9	5	1.9
Lovuinoe	-	-	-	-	2	3.9	10	3.9
Lovanue	-	-	-	-	1	1.9	8	3.2
Total:	92	100.0	448	100.0	51	99.9	253	100.0

Notes: [a] Also includes Lovonbise village and is possible that other small hamlets of Tangavu, Kamali Mbakeo and Barnabas station were also included in 1989.
[b] In 1979 this hamlet was referred to as Lester Tari station and in 1989 it was called Lolosara.

Source: Republic of Vanuatu, (1991)

Between 1979 and 1989 the resident population of the case study area in Longana decreased from 448 to 253 in the 10 year intercensal period. This means that an average annual rate of change of population in the case study area was -5.71 percent, while population change over a 10 year period from 1979 to 1989 was -43.5 percent. In accounting for this decline it should be noted that the 1989 Enumeration Area is slightly different from the area defined in 1979. In the 1989 Census figures Lovatumeamea and Ambambulu (Ambaebulu) school, which had 58 people in 1979 were excluded. Secondly, relocation of households to other parts of Ambae is also a possibility. In 1979 the case study area had 92 households in residence, by 1989 this number had dropped to 51. Thirdly, outmigration to other parts of the archipelago is a factor contributing to population decline between 1979 and 1989.

Over a period of 10 years, population in Navonda fell by 52 percent. This village was the Local Government Centre in 1979, but by 1989 this function had been moved to Saratamata. In 1989 there were 20 households (109 people) recorded at the Saratamata Local Government Council headquarters. A large part of a drop in Navonda's population is associated with the shift of the LGC to Saratamata in 1981.

Rodman (1985:62) identified that 66 people comprising 13 households lived in Wailengi in 1970. Twelve years later in 1982 she found 80 people in 18 households. She argued that mobility in Longana tended to be associated with "social factors of residential choice". They include movement of wives into the hamlet at marriage, marrying out of one's settlement of origin, living with siblings in the capital, establishing homes elsewhere, other islanders in the settlement returning to their home islands, and youngsters staying with sister's affines when married. Although Rodman (1985) does not make any reference to population decline in Longana or Navonda in the early 1980s, it is possible that social factors outlined above are all crucial elements which could have contributed to population change in the area during the period between 1979 and 1989.

In 1989 about 49 percent of the total resident population included in the case study was concentrated at Navonda. The "community" is composed of individual houses dispersed over a large area. It is a large rural settlement yet its structure still is that of a hamlet cluster, not a village. Navonda settlement is located at the centre of the case study area. It has an Anglican church building. Most rural residents living within the vicinity congregate at this church on Sundays. In addition, the presence of a block building located near it is evidence of an old Local Government Council centre. The centre was set up during the colonial period and was used until 1981 when the Ambae/Maewo Local Government Regional headquarters was established at Saratamata.

Most villagers cultivated their garden crops close to the Longana airport. Rodman (1987) observed in the early 1980s that this area was extensively used for making gardens because much of the land close to the settlements had been taken up by coconuts and small plots of cocoa. Fuelwood for household use was also obtained further away from the hamlets. This situation was not very different from that observed on Mota Lava.

It will be apparent from this brief overview of the physical and settlement geographies of Mota Lava and Ambae that there is diversity and differentiation in the socio-geographic features of the outer islands. This diversity creates particular socio-economic environments which, in turn, influence rural development. The next section of the Chapter describes the layout of villages included in the two case studies.

5.1.3 Description of case study villages: Nerenigman village and Longana area in 1980 and 1991

Nerenigman village is nucleated as are the neighbouring villages of Var, Totoglag, Qweyemagnde, Wovet and Ra. A church building and two meeting houses (*nakamal*), one each for men and women, suggest that there are communal gatherings which take place in Nerenigman. While the buildings are used by residents of the village for different activities, their presence invariably reflects a sense of communal involvement and organisation of social activities and village labour. Non-monetary activities involving communal labour included maintenance work at the two schools, an aid post, church buildings and the general maintenance of villages on the island. An example of labour sold for money and payment by food included assisting fellow villagers in activities associated with copra production. Helping store owners to unload goods from the ship for a cash payment of 100 vatu per load is another example.

The men's *nakamal* on Mota Lava are used for various social purposes among fellow villagers. These include airing village problems, preparing and holding village feasts, greeting visitors, dancing and occasional casual relaxation such as playing cards. Preparation of kava (*Piper Methysticum*) to meet social requirements of village feasts was also carried out in the men's *nakamal*. However, with little kava grown on Mota Lava, the men's *nakamal* was not frequently used to prepare and drink this beverage. This is unlike the situation prevalent in other parts of Vanuatu, such as Ambae.

The women's *nakamal* was used as a community kitchen. Food was cooked and prepared in this building to feed villagers who participated in community work. Local villagers and government officers coming on short visits to Mota Lava from other outer islands were also greeted, introduced and welcomed in the men's *nakamal*.

There is an open space between the church and the two *nakamals*. This space is occasionally used by the villagers as a recreation area. If the church and the two *nakamal* are taken as near centres of Nerenigman village, the next row of buildings contain sleeping houses spread randomly but encircling the church and the two *nakamal*. The layout of these residential houses does not show any significant spatial pattern. Each household has a sleeping quarter. Kitchens are located separately.They are often used for rest by the household members during the day.

Beyond the boundary of the village are kitchen gardens. A variety of greens or beans are harvested as supplements added to their foods. Finally, these kitchen gardens give way to coconut groves with an understorey mainly dominated by a variety of edible fruits and nuts to which reference was made in section 5.1.1 of this Chapter.

Presenting the morphology of Nerenigman village is incomplete without also describing the features of buildings and shelters. The description of the village does not in itself reflect the level of living standards of the rural households. The types of building materials used to construct houses is sometimes taken as an indicator of cash incomes. It should be noted, however, that corrugated iron roofs used by some island residents had been supplied by the national government as part of cyclone relief in the past. Cyclone Wendy of 1972 is relevant here along with other cyclones of the mid-1980s.

Most buildings and shelters on Mota Lava and Ra island are constructed out of bush materials. This includes Nerenigman village. In some cases they are constructed from a mixture of Western-style building blocks and bush materials. *Natangura* (wild sago) leaves are used for roofs. The walls are made of bamboo, although a taste for Western-style cement block buildings with corrugated iron roofs and glass windows is also apparent. Some households also used limestone or coral to build the floors of houses. This material, when suitably baked hard, is a valuable source of cement for constructing floors and walls of houses.

Some block buildings present on the island are public facilities. They include the two community schools of Woneski and Telhei. A dispensary at Nerenigman village also has block buildings. Other buildings are the QRTV Co-operative Society at Qweyemagnde village and the post office on the western end of the island. In addition, a number of church buildings and village houses used modern building materials, including the Seventh Day Adventist (SDA) and Assembly of God (AOG) churches in Nerenigman.

While the distribution of the resident population in Longana is dispersed, many villages are within daily walking distance of each other. This means that most rural dwellers prefer to commute to the neighbouring settlements by foot. Local villagers resort to the use of a motor vehicle when large loads of copra bags and firewood for household use have to be moved. The transportation of bulk western-type consumer goods, purchased by small business entrepreneurs from trade stores at Saratamata and the Commercial Centre at Lolowai, also requires vehicles. Depending on the physical distance covered, an average fee of 1,000 vatu is payable for the delivery of these items. However, the cost can vary and depends on the different destinations covered by the service. It is possible to negotiate with the taxi operator for a cheaper price for which some favour, such as kava, is expected to be returned at a later date. This practice of payment is similar to Sofer's (1985:427) observation about the Kadavu kava economy where a "lack of cash for a boat ticket to Suva can be offset by bartering with an appropriate quantity of kava which is gladly received by the boat operators". The operator either consumed it or the kava was sold to Suva market vendors.

The fact that these villages were dispersed over a large rural area does not imply that they were completely isolated from the influences of Western modernisation. The majority of the respondents owned and lived in block buildings. However, not all rural houses in the case study villages were constructed from Western-type building materials. Some respondents had houses completely constructed of bush material. Others were mixtures of both traditional and Western-type building materials, a situation not too different from that found in Nerenigman village on Mota Lava.

Cement block buildings with glass windows and the presence of permanent furniture in some village houses indicated that substantial amounts of money circulated within some kinship networks. As noted by Rodman (1985:63), "[m]any Longana hamlets had obviously changed...as populations grew and dwindled, and as cement houses replaced older bamboo dwellings". She observed that "between 1978 and 1982, more than 80% of the buildings changed households, underwent major physical changes, or both" (Rodman, 1985:67). This description captures the notion that households were experiencing rapid socio-economic change associated with development of the cash economy, especially the production of copra, cocoa and kava. Some funds and building materials were also remitted by relatives working in Luganville or in Port Vila. This gradual transformation in residential patterns, changes in building materials of houses and a decline in the resident population of Longana hamlets continued into the early 1990s.

The ownership of motor vehicles and the operation of trade stores in some villages indicate the presence of an emerging rural bourgeoise. Rodman's (1981, 1984 and 1987) studies note that the emergence of relatively rich peasants in Longana resulted from customary land distribution and the production strategies the large landholders followed. The heirs of these rich peasants have continued to prosper during 1990s.

A motivation for capital accumulation by prosperous peasants in Longana was ownership of large retail shops. Several were owned by local villagers at Lolowai, Wailengi and Saratamata. These stores sold a variety of consumer goods. In addition to retailing, they also bought copra from fellow villagers. They acted as middlemen in the copra trade. For example, a prosperous local entrepreneur at Lovatumalava hamlet was involved in the purchase of kava roots from the neighbouring villages. They were packed into 70 kilogram hessian bags. He was buying kava from fellow villagers who had children in schools. In this way the buyer was assisting the parents to have access to some cash income, which proved difficult to generate during the period when the price of copra was low.

This rural entrepreneur also owned a trade store, a four wheel drive vehicle, a cattle paddock with 35 animals in it and, in 1991, established a kava bar in Santo. His purchase of kava in the hamlets around Longana was an attempt to constantly supply this bar at Santo. The entrepreneurial qualities demonstrated by a handful of Longanans was a clear indication of motivation to exploit opportunities in the cash-economy. The type of activities described above, with the ownership and the physical presence of various capital resources, differentiated the emerging and the prosperous peasants from their fellow villagers.

5.2 Structure of village economies on Mota Lava and in Longana: a perspective from the early 1980s

The analysis of change in village economies from the early 1980s commences with an examination of aspects of subsistence agriculture. This is followed by reviews of copra production and other cash crops, livestock production, wage income, remittances, sale of commodities such as handicrafts and clothing, and the hire of household items. The village economies prevalent in the early 1980s are then compared with the situation that existed in 1991.

5.2.1 Subsistence base

Villagers on Mota Lava and in the Longana area rely predominantly on agricultural produce for their livelihood. There is extensive use of land for gardening of food crops. In both case study areas, some land is also devoted to copra production. With the incorporation of rural households into the monetised economy the subsistence base of villages is invariably affected. Production of food crops for generation of income becomes part of daily household activity. The extent to which there has been any further transformation in the subsistence base resulting from these influences in the two case study areas since the early 1980s is the central theme of discussion in this section.

Campbell (1985) has described aspects of subsistence economy and land use types on Mota Lava. With reference to subsistence agriculture on the island during the early 1980s, he observed that gardens were "very highly fragmented, each distinctive in terms of size and shape, the physical qualities of the terrain, distance from the home, and the uses to which it is put" (Campbell, 1985:88). The main food crop grown in the gardens is yams which are of different "varieties, taste, texture and size" (Campbell, 1985:89). According to Campbell (1985), the most important area where subsistence food crop production took place in the early 1980s was close to the centre of settlement on the western end of the island.

This description of Mota Lava's subsistence base and its land use types in the early 1980s was still relevant in the 1990s. The islanders continue to use land close to the settlement for subsistence food crop production, although additional land is now required to make gardens by Nerenigman villagers at other locations such as Hiley and Valua.

Since the early 1980s there has been little effort by rural villagers to incorporate other cash crops, such as vanilla, cocoa or pepper into their current land use practices. The household survey in 1991 revealed that out of the 42 households interviewed in Nerenigman village, seven (16.7 percent) were cultivating pepper, two (4.8 percent) were growing vanilla, and one (2.4 percent) was growing grapefruit (Household survey, 1991). The majority of households (76.2 percent) were not growing any cash crops other than coconuts. Subsistence crop cultivation, supplemented by copra production, has continued to be the core economic activity of most households in Nerenigman village through the 1980s.

The questionnaire seeking information on the location of gardens revealed that lands at three different locations on the island were intensively utilised by residents of Nerenigman. A total of 34 households (80.9 percent) utilised land close to Nerenigman village, 31 households (73.8 percent) farmed land at Valua on the eastern tip of the island, and 25 households (59.5 percent) were also cultivating their food crops at Hiley (Figure 5.4). It should be noted that each household was cultivating more than one parcel of land at any one time. In this case Campbell's (1985:106) observation that "land closest to the loci of settlement [was] more intensively utilised than that at greater distances" is still evident in 1991, although Valua and Hiley have become important locations for garden production as well. These two locations are four hours and two hours round trip by foot respectively.

In the case of Longana, Rodman (1987) observed that land close to the airport was intensively used for subsistence agriculture. Other villagers also made their gardens on the hillslopes, use of which was not limited only to the nearby residents. This situation became apparent because as cash-cropping increased the amount of land available for gardens also decreased "so that by 1978 the only reserve of lowland garden land in Longana remained in the foothills near Longana airstrip" (Rodman, 1987:63).

By the early 1990s there had been no change in the general location of most of the gardens, since the planting of coconuts as a major cash crop in the 1930s took up good garden land close to the settlements. This is evidenced by the fact that 19 households (54 percent) responded by stating there had been no significant change and that land near Longana airport still continued to be intensively utilised (Table 5.3). Table 5.3 below is a summary of the number of old gardens, new gardens and new land clearing by households in the case study areas.

Table 5.3: Total number of different garden types in Nerenigman village and the Longana area, 1991

Garden type	Nerenigman village		Longana area	
	Number	%	Number	%
1. Old gardens[a]	172	64.66	100	49.95
2. New Gardens	37	13.91	88	41.31
3. New land cleared	57	21.43	25	11.74
Total:	266	100.0	213	100.0
Total no. of HHs interviewed:	42		35	
Mean number of gardens per HH:	6.3		6.1	

Note: [a] In the context of this study, an "old" garden is a parcel of land that has been cultivated and left to fallow. However, some food crops still grow on this plot of land which owners harvest regularly to meet household requirement.

Source: Household survey, 1991.

The mean number of gardens per household in both case study areas in 1991 was six. In the case of Mota Lava, this figure confirms Campbell's (1985:97) observation where each household was "cultivating as many as six to ten yam gardens in different stages at any one time". When the mean number of gardens per household in Nerenigman for different garden types was calculated, the results were as follows: for Nerenigman old gardens (4.09), new gardens (0.88) and new land clearing (1.35). On the other hand, Longana's households were cultivating old gardens (2.85), new gardens (2.50) and new land clearing (0.71). In the case of Nerenigman in particular it is apparent that many households frequently depend on meeting their subsistence requirements from old gardens.

Table 5.4 shows household responses with reference to changes in the intensity of garden cultivation over the previous year. It was possible for respondents to indicate the type of change that took place in their own gardens in the last season, in 1990.

Table 5.4: Household responses to changes in gardening practices in Nerenigman village and the Longana area, 1991

Type of change since 1990	Nerenigman Village		Longana area	
	No. of HHs	%	No. of HHs	%
1. Less land used	6	14.28	3	8.57
2. More land used	18	42.85	12	34.28
3. Planting more varied food/cash crops	13	30.95	9	25.71
4. Mixture of food and cash crops	6	14.28	3	8.57
5. No significant change	16	38.09	19	54.28
Total number of HHs. interviewed:	42		35	

Source: Household survey, 1991

It is apparent from Table 5.4 that generally there were no significant changes in the intensity of the gardens cultivated. The number of responses in each category overlap. For example, while it is noted that there were no significant changes in the gardens cultivated by some households, it was also possible that some of these households were simultaneously planting more varied food and cash crops.

Major food crops grown in the gardens of households in both areas were yams, cassava, bananas and taro. Other supplementary crops included pineapple, sugar cane and kava. Villagers also derived food from subsistence tree crops found all over the island. They included breadfruit and coconuts. Other edible fruits and nuts included *nandae* (Bislama) (*Myristica fatua*), *nandao* (Bislama) (*Pometia pinnata*), and *navel* (Bislama) (*Barringtonia edulis*). Some of these subsistence tree crops also had other uses such as extraction of poisons to stun fish from the bark of the *navel* tree.

Households in Nerenigman village and Longana also cultivated exotic vegetables such as cabbages, tomatoes and beans. These were planted during the period when the other main food crops were maturing. They were harvested for household consumption or for sale in a community market.

The following trends, with reference to the subsistence base, are apparent. Firstly, there is some evidence that the average number of gardens cultivated by each household has not changed much since the early 1980s. Secondly, the location of gardens has not changed much over the decade. As was the case in 1981, Valua and Hiley continue to be important locations for making gardens, apart from intensive land use closest to Nerenigman village. This suggestion is supported by the fact that 18 households or 42 percent indicated that more land was used for gardening purposes. Using more land did not necessarily mean that the villagers had increased the number of their farm plots, however. Villagers were now travelling long distances to make gardens because subsistence food production was composed of clusters of several garden units spread over the island. This trend was beginning to intensify in 1981 (Campbell, 1985).

Another feature revealed from the case study evidence in both areas is that subsistence foods made an important contribution to generating cash income for some households in 1991. While no statistical data exists to make comparisons with the early 1980s, a large proportion of the population included in the survey in 1991 sold garden products. Revenue generated from the sale of fruits and nuts is shown in Table 5.5, which indicates that this activity was more important in Longana.

Table 5.5: Value of income from fruits and nuts in Nerenigman village and the Longana area over a six month period, 1991

	Nerenigman	%	Longana area	%
No. of HHs. selling fruits and nuts	24	57.14	27	77.14
Value generated[a] (vatu)	14,400	9.95	84,800	9.05
Mean per household	449		2,422	
Mean per producing HH.	600		3,140	
Standard deviation	590		3,180	
CV (%)	98		101	
Total no. of HHs. interviewed	42		35	

Note: [a] The recall period for data presented in this Table refers to the six months before the date of interview.

Source: Household survey, 1991.

More than 50 percent of households in both case study areas sold fruits and nuts to earn income. About 9 percent of total revenue came from this source. Revenue per household of all those included in the survey in Nerenigman village was 342 vatu, while mean income per producing household was 600 vatu. The standard deviation was 590 vatu with a coefficient variation at 98 percent. In the case of Longana, revenue per household was 2,422 vatu, with a mean revenue per producing household around 3,140 vatu. The standard deviation was 3,180 vatu and coefficient variation was 101 percent.

Some inferences can be drawn from the spread of this income among the households in the case study areas. Firstly, in the case of Nerenigman, about 24 households or 57 percent of the total number interviewed sold fruits and nuts. Revenue received from this source by the sellers ranged between 50 vatu raised by one household to 2,000 vatu raised by another. The latter amount was received by two households only. Although the range of incomes was 1,950 vatu, the mean income was higher than the standard deviation calculated (Table 5.5). On the other hand, 27 households or 77 percent of those interviewed sold fruits and nuts in Longana. The lowest income generated from this source was 100 vatu, while the highest income received by three sellers was 10,000 vatu. This gives an income range of 9,900 vatu among the 27 sellers resulting in the standard deviation being higher than the mean.

While subsistence agriculture is the main daily activity of households included in the survey, copra production is a regular cash-generating activity for most households. The significance of this activity in improving the material welfare of communities on Mota Lava and in east Ambae is discussed next.

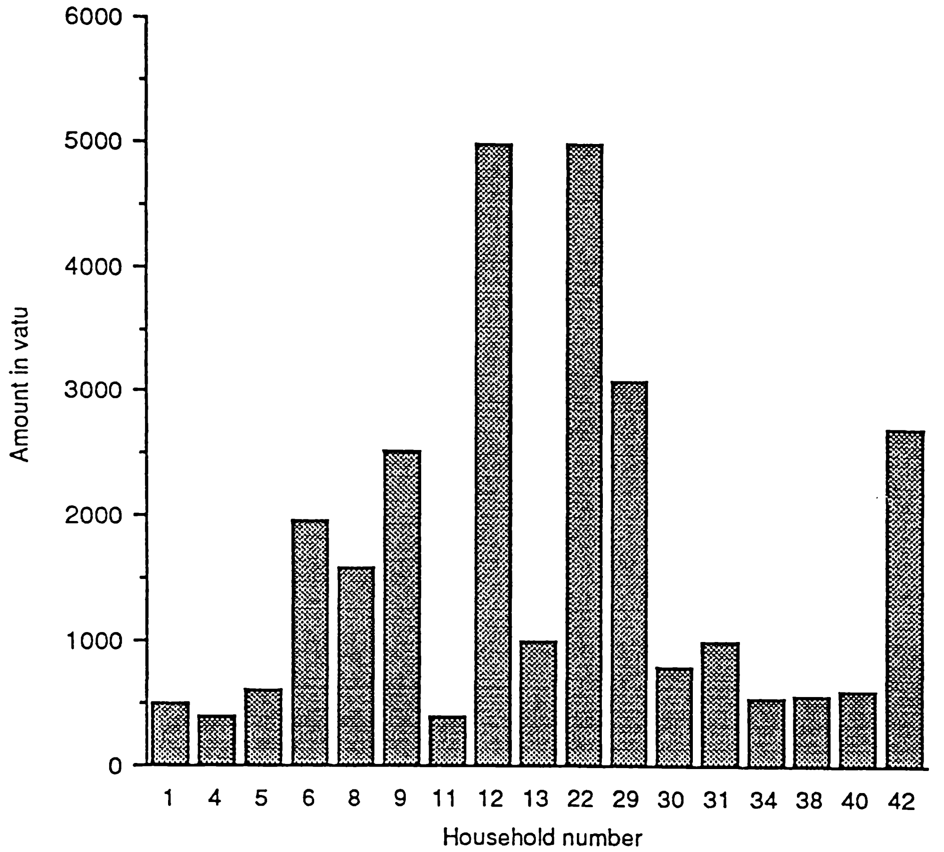
5.2.2 Copra production

The household is the basic unit of both copra and subsistence production on Mota Lava and in Longana. Copra remains the primary, and in many cases the only, source of cash income to the households. The labour force for copra production revolves around the husband and wife, who are the nucleus of the family, with dependent children included for some periods of the domestic cycle (Rodman, 1987).

Through the 1980s, households on Mota Lava and in Longana have continued to produce copra. It is the major cash earner on Mota Lava, while on Ambae copra has been displaced by kava as a source of cash in some households. According to Campbell (1985:133), from the mid-1970s to the early 1980s Mota Lava and Ra produced around 175 tonnes of copra annually which is equivalent to 0.5 percent of annual national production. This meant that an average of 875 kilograms was produced annually by each household on the island, while in 1979 the two co-operative stores exported around 165 tonnes of copra which generated 4.5 million vatu. On average, copra production for the 174 village co-operative members was 948 kilograms per member for the year. Thus, income derived from copra production on Mota Lava and Ra in 1979 was 21,226 vatu per household or about 4,500 vatu per person (Campbell, 1985:133-134). As Campbell (1985:134) notes: "This was the period of highest prices [and]... was also the period of greatest household income, the survey group averaging 6452 [vatu]".

Campbell's (1985) observation that the distribution of copra production and income among households was variable has continued through the early 1990s. This variability, with reference to the distribution of income generated by 17 households from the sale of copra in Nerenigman village, is shown in Figure 5.5. The recall period for information presented in Figure 5.5 refers to the last six months of copra production by the households included in the survey.

Apart from copra production, revenue for households on the island in 1980 also came from short-term wage employment of local villagers on the island, sale of food crops to regularly paid public servants working on the island, and sale of fish and garden food crops to the French language school. The limited opportunity to generate ready cash to purchase consumer goods from local co-operative stores also encouraged some households "to go into debt at the co-operative store" (Campbell, 1985:154). In a different context, Rodman (1987) makes this observation with regard to Longana where low prices for copra in mid 1979 made small producers visibly less affluent. This affected the consumer behaviour of some households and villagers who passed up corned beef and other tinned meats that they had consumed copiously in 1979 in favour of less expensive tinned meat. And in contrast to 1979, only one of the villagers had travelled outside Longana in 1982 (Rodman, 1987:97).



Source: Household survey, Nerenigman village, 1991.

Figure 5.5 : Distribution of income earned from copra by households in Nerenigman village over a six month period, 1991

Rodman's (1987:113-114) assessment of the landholders' wealth was mainly based on copra production. Other opportunities for generating revenue for rural households in the survey group were not considered. If comprehensive data about money earned from other major enterprises had been included in the analysis, this could have revealed further insights to the prevalence of income concentration between the different landholders in Longana. Her assessment of rural households' copra monetary wealth represents only a portion of Longanan's actual incomes from all sources.

Rodman's (1987) study revealed a number of interesting factors with regard to copra production as a cash crop in 1980. In Longana the 64 landholders included in her survey earned "$148,809 from copra sales, an average income of $2,325 per landholding unit" (Rodman, 1987:110). This income was not equally distributed. For example, Rodman (1987:110) found that seven landholders' income averaged $9,520. The remaining 57 landholders received only $1,441 per landholding unit from copra sales. The per capita income for the 7 landholders, together with their 94 dependents, was $660, while for the remaining 57 landholders and their 419 dependents it was $173. These figures suggest a progressive widening in the gap in wealth between those who controlled large plantations and those with smaller holdings. In the context of this income concentration and differentiation, Rodman (1984:77) observed that:

> a category of relatively rich peasants is emerging in Longana through inequalities of customary land distribution that allow a few large landholders to earn incomes at least four times as large as the average copra producer.

The extent to which this observation made in 1980 holds, therefore, becomes a crucial question in assessing aspects of rural prosperity in the study area in 1991. Copra continues to be the main source of income to rural households on Mota Lava and an important source in Longana. Table 5.6 shows the income generated from sale of copra by households in the case study areas.

It is evident that the income received by households from copra sales in Longana is five times more than that in Nerenigman village. Furthermore, a much higher proportion of households in Longana participated in copra production than was the case in Nerenigman village. There are some reasons which are suggested vfor low copra production on Mota Lava. Firstly, copra producers on Mota Lava are mainly small producers and copra is often produced only when the need to meet some household cash requirement arises. Secondly, suitable copra drying facilities on Mota Lava are not well established, which means the product often goes to waste and becomes unmarketable. This problem is further compounded by infrequent shipping services to the island, an issue discussed in Chapter Six.

Table 5.6: Value of income from copra in Nerenigman village and the Longana area over a six month period, 1991

Village	No. of HHs. selling	%	Total income (vatu)	%	Income/HH. (all HHs[a]) (vatu)	Income/HH.[b] (prod. HH) (vatu) Mean	SD	CV (%)
Nerenigman	17	40.5	31,800	22.0	757	1,870	1,530	66
Longana	25	71.4	170,040	18.2	4,858	6,801	5,010	70

Notes: [a] Total number of households interviewed in Nerenigman was 42 while in the case of Longana area it was 35.
[b] Number of households producing copra. SD means standard deviation and CV is the coefficient variation, expressed as a percentage.

Source: Household survey, 1991.

Various supporting facilities used to produce copra in Nerenigman village and in Longana determined the quality of the commodity produced. There were eight copra driers and five copra docks which were used by the villagers on Mota Lava and Ra island. The ratio of households to these facilities were 25 and 40 households per copra drier and dock respectively. However, some of these facilities were infrequently used by the copra producers. This was because many tended to resort to sun-drying, although this technique proved sensitive to weather conditions. In the Longana area there were 21 copra driers and one communal copra dock. This meant that on average there was a ratio of five households to every copra drier.

In the absence of hot-air pipes or smoke houses in some villages of Mota Lava, households used a range of methods for copra drying. One technique involved the drying of green copra on the surface of corrugated iron sheets. These iron sheets were placed in an open space in the sun. Copra was spread over the sheet. The producer regularly turned the copra so that solar radiation was distributed evenly over the product. A second method was the use of open unsheltered beds raised on posts with wire matting spread over the whole bed. The copra was placed on top of this matting to be dried by the sun's heat. The final practice was to spread green copra on flat cement slabs such as the cement floors of old buildings. When these cement blocks were exposed to extreme sunlight the heat was retained in the cement. This dried the copra. The copra was then left in the sun until the kernels turned brown.

While these techniques were appropriate in terms of cost effectiveness with little labour input, sun-drying methods described above also created some difficulties. For example, I observed in early 1991 that bad weather conditions such as rain made copra wet. Insufficient sunlight also contributed towards high moisture content in the product. This consequently reduced the quality. The product became unmarketable, and rather than generating income it became an excellent source of fuel for cooking food.

Supporting facilities used for copra production on Mota Lava require upgrading. For example, the copra depot used by the community at Nerenigman village needs some maintenance. This problem had been prevalent for some time but was not attended to because of financial difficulties associated with the purchase of relevant building materials. Secondly, parts of a hot-air pipe system used for drying copra were donated to the island by the national member of parliament. This was part of his electoral contribution to the constituency. However, owing to a lack of interest shown by the villagers because of low copra prices, this pipe was left in the village to rust, becoming unusable. The lack of interest in the equipment was further compounded by low copra prices. This was a classic example of a development "input" from the national government which had not been put into productive use.

Comparing Mota Lava with Longana, it is apparent from the case study evidence that the latter has a well developed infrastructure with reference to marketing arrangements and the presence of large numbers of commercial enterprises which buy copra. This infrastructure also plays vital roles in promoting copra production. For example, a Commercial Centre serving the whole Ambae/Maewo Local Government Region is located at Lolowai. It is a foci of commercial activity, which is associated with the island's imports of consumer goods and exports of various agricultural products, such as copra. There was also evidence, in 1991, of the larger producers who follow "new kinds of entrepreneurial, middleman, landlord and wage labour relationships" (Rodman, 1987:115). The entrepreneurial abilities of some households in Longana have promoted copra production as a dominant activity, so that in 1991 about 71 percent of the all households included in the survey produced copra.

When data on copra incomes for the two case study areas are compared for 1980, and the situation which prevailed in the early 1990s, it is evident that there had been some changes over the decade. While the late 1970s and the early 1980s was a period of high copra prices, the situation in 1991 was that production levels remained small, and for some households it had declined. This decline led to periods of low income which, in part, was attributed to a low world price of copra since 1984. When monetary benefits which accrued from copra production alone are examined for the 1980s, there is some evidence that in both case study areas the producers were earning less income from copra in 1991 than was the case in the 1980s.

The respondents also recalled earning "larger" incomes from copra in late 1979 and the mid-1980s than was the case in 1991. These were years which were associated with high copra prices, and it is no wonder that household incomes generated from copra sales were much higher. Due to the fact that the price of copra paid by the VCMB has continued to decline from 33,000 vatu per tonne in 1984 to 31,026 vatu per tonne in 1989, production of copra and income derived from this source has continued to be variable. The highest price paid by VCMB during the 1980s was 39,730 vatu per tonne in 1985. The patterns of income distribution among copra producing land-owners included in the survey in 1980 (Rodman, 1987) and my household survey in 1991 for the Longana area are given in Figure 5.6a and 5.6b respectively.

It is important to note that these graphs refer to different universes (individuals in Figure 5.6a and households in Figure 5.6b), different periods (a year for Rodman, six months for me); different currencies are used (Australian dollars for Rodman and I use vatu). Due to these differences they are not directly comparable. I am aware of this deficiency and the different sorts of information which are presented. In addition, values which are used are currencies of the day and I have not tried to control for inflation in values of currency or to standardise the data in terms of either 1980 dollars or 1991 vatu. However, the purpose of using these graphs is to illustrate that there is inequality in income distribution among the rural copra producing villagers in Longana, and that these inequalities have persisted through the 1980s.

While Rodman's (1987) data indicates a pattern whereby a majority of 64 individual landholders included in the survey were earning an average of $2,325 per landholding unit per year, the situation in 1991 was that the 25 copra producing households included in the survey earned an average of 6,801 vatu over a 6 month period. By 1991 copra production was the third most important source of revenue for households in the case study area. The other noticeable difference in income distribution is that Rodman's (1987) data is clustered to the left of the graph, which suggests that in 1980 there was "differentiation in terms of income between those who control relatively large plantations and those with smaller holdings" (Rodman, 1987:111). On the other hand, my field data of 25 copra producing households does not show any marked concentration. It should be noted that the income data are nominal values, and in 1991 there was a standard deviation of 5,010 vatu and a coefficient variation of 70 percent for the copra incomes of the producing households.

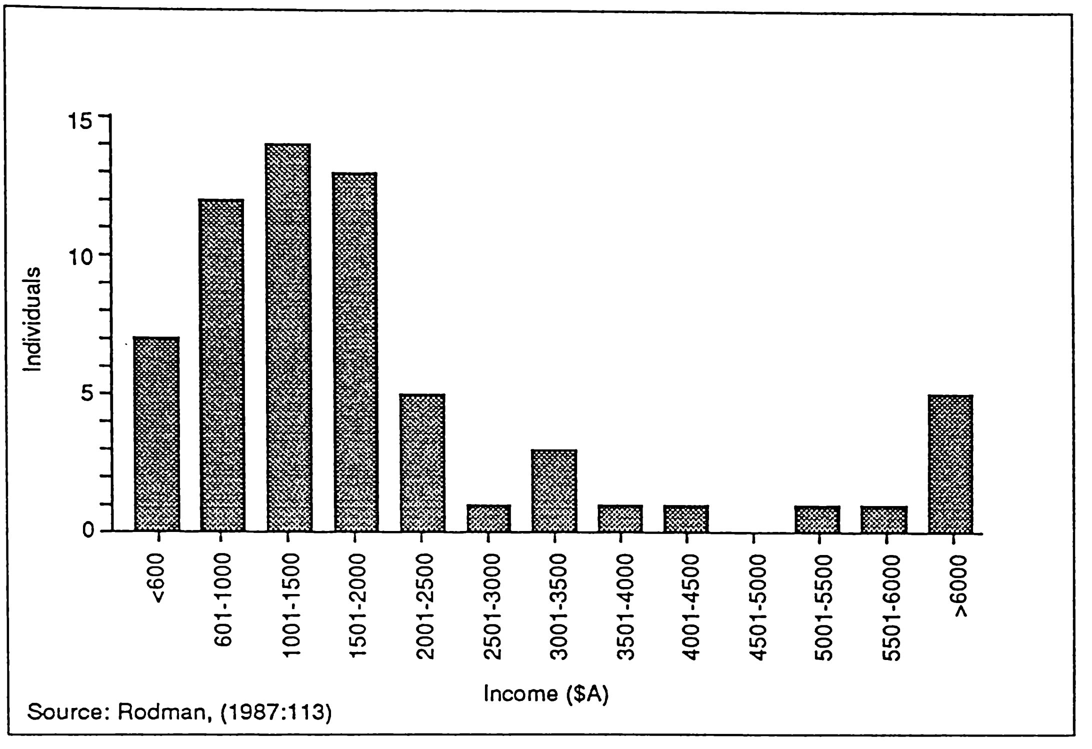


Figure 5.6a : Income in Australian dollars for individuals in the Longana area, full year 1981

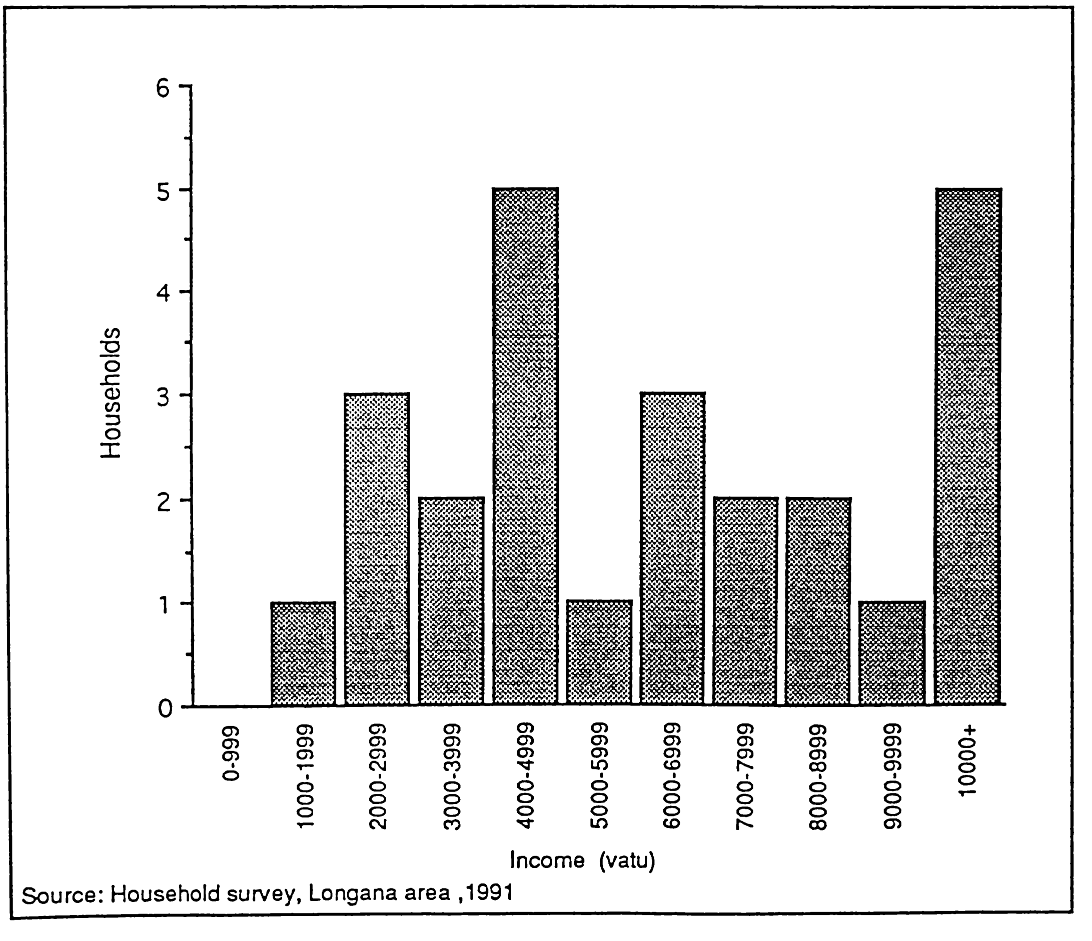


Figure 5.6b : Income in vatu for households in the Longana area, six months of 1991

5.2.3 Other cash crops (cocoa and kava)

Other cash crops also generate revenue for households in Nerenigman and Longana, especially cocoa and kava. The world price for cocoa is more favourable than that for copra as is illustrated in Figure 5.7. Kava, for some households in Longana, has become a major cash earner since Rodman did her field research.

Campbell (1985) does not make any reference to the production of cocoa and kava by households on Mota Lava. This implies that these crops were not significant sources of income for the islanders in the early 1980s. During the period 1982 to 1989, Mota Lava exported only 4 tonnes of cocoa (Republic of Vanuatu, 1990:14). In 1991 a small number of islanders were producing cocoa and kava. In Wovet village a small trade store owner sold powdered kava which was imported from Santo, while a small amount of cocoa was produced in the north-eastern tip of the island. It was not a major source of revenue, partly because of problems associated with infrequent shipping services to the island.

Rodman (1987) makes reference to cocoa as an alternative cash crop to copra in Longana in the early 1980s. Rural dwellers in Longana have been involved with cocoa production since the late 1970s, although it was first introduced to the Condominium in 1905 from Ceylon. In 1978 Longana exported about 38 tonnes of processed cocoa (Rodman, 1987:106-107). At the time the market price of the commodity was $1,000 per tonne. The price is more lucrative than copra and has been well above the price of copra through the 1980s (Figure 5.7).

There are major difficulties associated with ready adoption of cocoa as a cash crop by rural villagers. These include the need for frequent attention during the initial planting of the crop, skill required in cultivating the crop, various costs related to cocoa processing, and risk and uncertainties which accompany innovation.

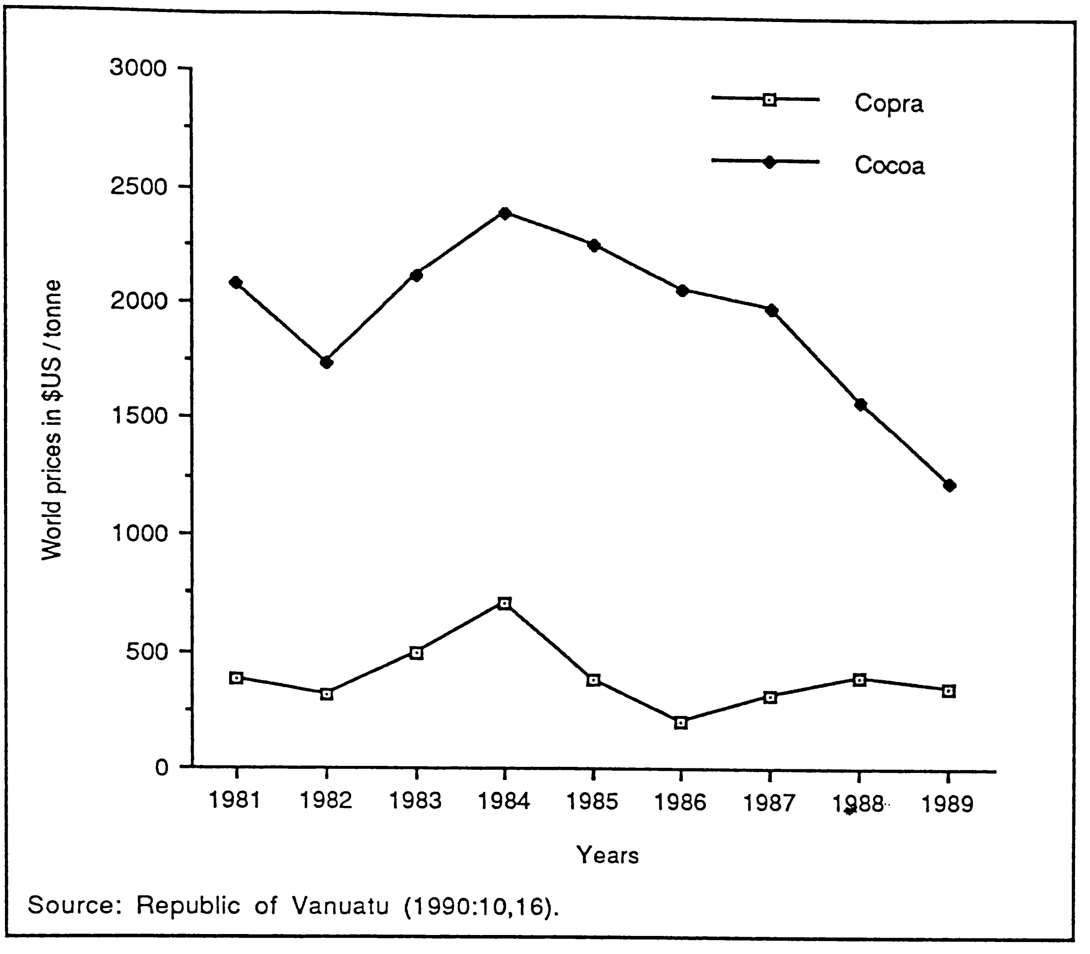


Figure 5.7 : World price of copra and cocoa, 1981 - 1989

Rodman (1987) does not make any reference to kava being a major cash crop in Longana in the early 1980s. This implies that the crop was not important as a cash earner, although her assessment of sources of income to Longanans was based on copra only. In this regard Rodman (1987:113-114) indicated:

> I was not able to collect comprehensive data about money earned from such major enterprises as truck-taxi businesses and trade stores or from smaller entrepreneurial ventures such as selling cattle, bread, or vegetables. I do know that some individuals earned as much from taxis and stores as they gained from copra.

In 1991 a total of 21 households or 60 percent of households in Longana sold kava. Only five households, or around 12 percent of these in Nerenigman village sold kava. The total amount earned by Nerenigman households over the six month before the survey from this source was 2,900 vatu. It contributed about two percent of revenue when compared with other sources of income for households in Nerenigman village.

With the instability in the world price of copra, the cultivation of kava as a major cash crop by rural households in Longana can be seen as a logical development. The price for kava depends on internal demand, while copra prices depend on external market prices. In 1991 kava generated lucrative returns to some Longanan households. For example, a price of 3,000 vatu was paid for a well packed 70 kilogram hessian bag of kava roots. This came to about 42 vatu per kilo. On Mota Lava a few villagers who grew the crop earned 1,500 vatu from the sale of the whole body of the plant. This price was twice as much as those of equal size sold in Longana. This is partly attributed to limited supply of fresh plants on the island.

Due to the limited production of kava on Mota Lava, occasional drinkers purchased this product from other outlets. It was sold in powder form in the island stores at a price of 280 vatu for a 150 gram plastic bag although ground and packaged kava produced by a small privately owned plant in Santo was selling for a gate price of 600 vatu per kilo (Lamboll, 1988:16). Some kava sellers in the village also bought their supplies of powder from Santo. When the kava was prepared in liquid form, prices of 30 vatu and 50 vatu were charged for different sizes of coffee glasses. Alternatively 100 vatu was paid for a soup bowl. Importing powdered kava to Mota Lava by small trade store owners in 1991 prevailed because of problems with the supply of fresh kava.

In the late 1980s the average village or farm gate price of kava in Vanuatu was estimated at 83 vatu per kilogram, although regional variations in the price exist, which range from 66 vatu per kilogram on Pentecost, where kava is plentiful, to 190 vatu per kilogram on Malakula where supply has not kept up with demand (Republic of Vanuatu, 1990). When comparing this price with copra, the return for a similar volume of smoke or hot-air dried copra in 1991 was only 15 vatu per kilo to the producers. Given this price differential most rural households in Longana area indicated that production of kava was more lucrative than copra. This view is supported by the number of kava plants grown on Ambae in the mid

1980s. These figures are compared against other producers of kava, such as the Banks Group, Pentecost and Tanna. This is shown in Table 5.7.

Table 5.7: Number of kava plants planted in the selected islands of Vanuatu in 1984 and 1989

Island	1984	Plants per HH (1979[a])	1989	Plants per HH (1989[a])	% increase in plants (1984-89)
Banks	n.d.a[b]	n.d.a[b]	78,028	96	-
Ambae	249,846	155	552,834	308	121
Pentecost	823,724	428	1,282,509	533	56
Tanna	1,001,629	336	1,253,390	312	25

Notes: [a] The total number of households recorded in the 1979 National Census is used to calculate plants per household for the 1984 data, while the 1989 data uses total number of households recorded for each island from the 1989 National Census
[b] "n.d.a" means "no data available". This is because the 1983/84 Agricultural Survey by the DALF did not include the islands in the Banks Group in the sample survey.

Source: Republic of Vanuatu (1985, 12.7; 1990, 14)

A suggestion that kava has become one of the main cash crops in the 1980s and the early 1990s for some households in the selected islands of the Republic is certainly evident from information presented in Table 5.7. The total number of plants cultivated between 1984 and 1989 on Ambae, Pentecost and Tanna all increased. When percentage increases in the number of kava plants cultivated over this period are considered, it is evident that Ambae has experienced much more significant change over the five years than Pentecost or Tanna (Table 5.7). Many more households on Ambae were planting kava as a cash crop by 1989.

A trend towards substitution of kava for other cash crops has been observed by Sofer (1985:422) in Kadavu. Kava cultivation replaced copra production on Kadavu as the major cash crop in direct response to price fluctuations for copra. An increase in the number of kava plants cultivated by rural farmers on Ambae is matched by a decline in copra production received for export between 1981 and 1989 (Republic of Vanuatu, 1990:5). This trend is much more obvious for Ambae than it is for Mota Lava after 1984 (Figure 5.8).

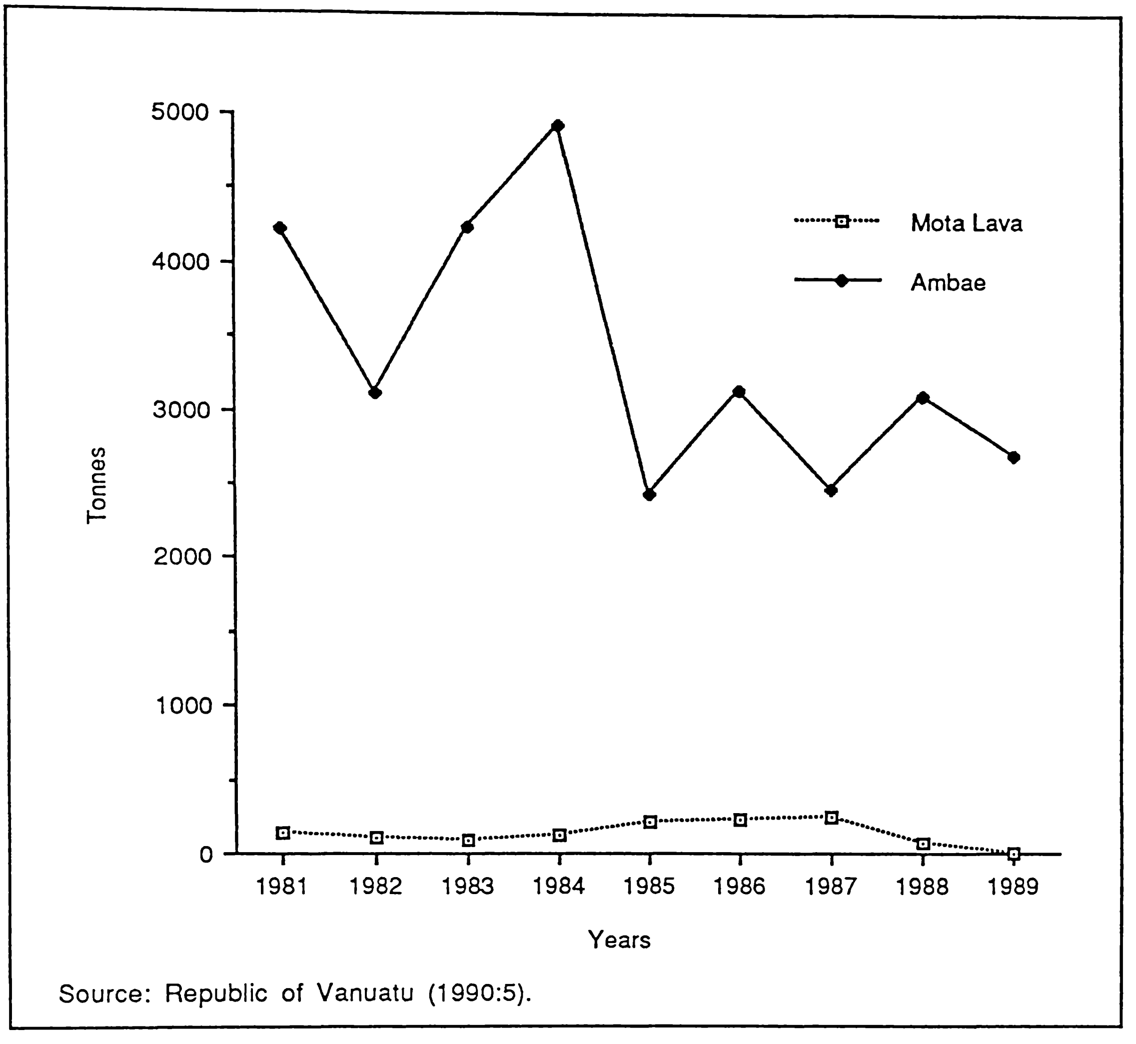


Figure 5.8 : Copra received for export from Mota Lava and Ambae, 1981 - 1989

An observation from Figure 5.8 is that, while annual copra production on Ambae has been declining since 1984, production levels for Mota Lava since this period have been low but constant until after 1987 when production began to decline. One reason is that while rural farmers in Longana can readily substitute copra with other high value cash crops such as kava, the situation on Mota Lava is that copra remains the only dominant cash crop. This means that when price of copra drops the islanders still cut copra because there is no other alternative crop to substitute as a cash generating economic activity.

Table 5.8: Value of kava income in Nerenigman village and the Longana area, over a six month period, 1991

Village	No. of HHs. selling	%	Total income (vatu)	%	Rev./HH. (all HHs.) (vatu)	Rev./HH. (prod./HH.) (vatu) Mean	SD	CV (%)
Nerenigman	5	12.0	2,900	2.0	69	580	360	62
Longana	21	60.0	304,600	32.5	8,702	14,502	13,170	90

Note: SD means standard deviation and CV is coefficient variation, expressed as a percentage.

Source: Household survey, 1991.

Table 5.8 shows the number of households who received income from kava in Nerenigman and in Longana in 1991. It is clear that kava was a much more important cash crop for households in Longana than was the case in Nerenigman. Income generated from this source, as a percentage contribution to total household income was two percent in the case of Nerenigman, and 32.5 percent in Longana. This situation prevails because Tanna, Pentecost and Ambae produce over 80 percent of Vanuatu's kava. Households on Pentecost and Ambae, which sell kava, make average sales of over half a tonne per annum per household from an estimated total sales of 1,300 tonnes per annum (Republic of Vanuatu, 1990:14-15).

The kava roots are usually sold in raw form in *nakamal.* A kava producer sells the product to a village store or to individual local middlemen. Some kava is also sold to kava bars (often referred to as *nakamal* in Port Vila and Luganville (Crowley, 1992). A general pattern of major marketing outlets of kava established within the archipelago is shown in Figure 5.9. In common with the copra grower, a kava seller in a rural village is linked to various marketing channels (Lebot et al., 1992:175-188). The opportunity to prosper as a successful entrepreneur, and to sustain a viable kava economy as a major commercial enterprise, depends upon these linkages.

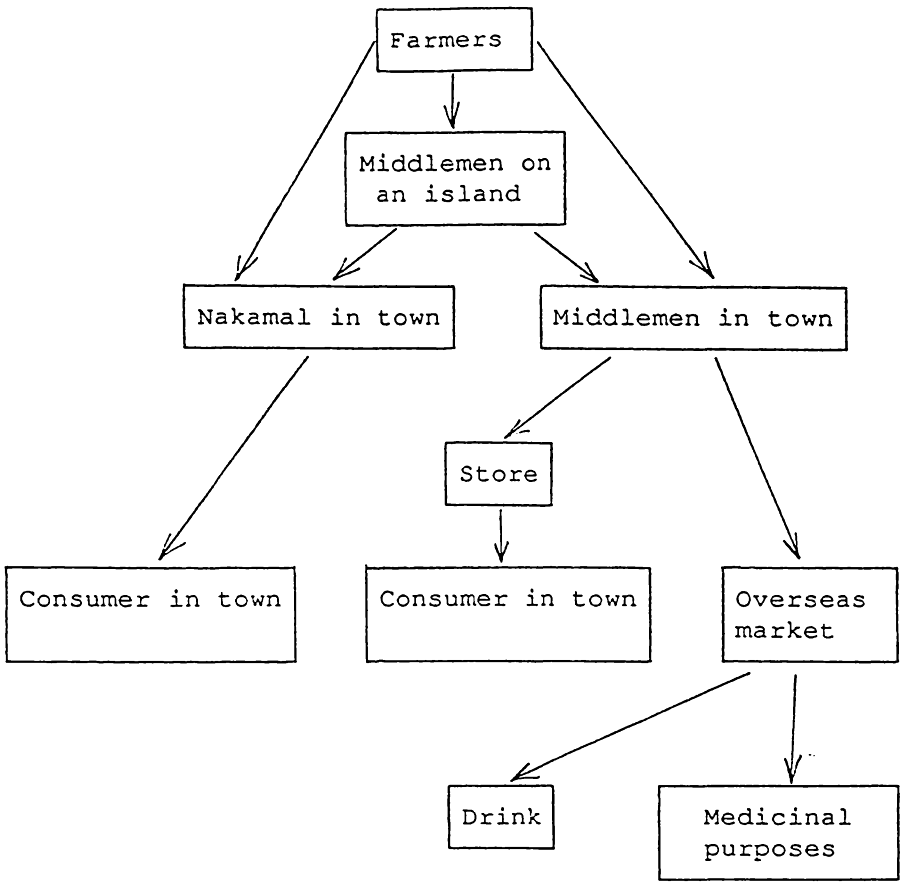


Figure 5.9: Major kava marketing channels in Vanuatu

Source: Lamboll, R. (1989: 6)

Sofer's (1985:431) possible explanations for expansion of kava production in the outer islands of Fiji, which include "agrotechnical advantages, market matters and centre-periphery relations", have some relevance and application in the rural areas of Longana and, to a lesser extent, on Mota Lava. Sofer's (1985) argument that areal specialisation in kava overcame the lack of other economic opportunities in the peripheral areas of Fiji is not particularly valid on Mota Lava. One of the reasons respondents cited for not growing kava on the island was that it is not a traditional crop as in most islands of the Republic such as Ambae, Pentecost or Tanna. Secondly, external revenue sources, such as remittances from relatives working in Port Vila or Luganville and other islands of the archipelago, are important in this peripheral economy.

The importance of kava as a major cash crop in the rural economy of Longana illustrates the fact that there has been a shift of emphasis from copra production to kava by rural villagers. It seems apparent that a gradual transformation of cash crop production is under way from one of heavy dependence on copra, to increasing commitment to a product from which returns to growers are more favourable given an expanding domestic market for the crop (Lamboll, 1988 and Crowley, 1992).

The extent to which the domestic market can continue to absorb increasing supplies of kava is a question which will have to be addressed by Vanuatu's agricultural extension officers who advise villagers on profitable cash cropping alternatives. In the immediate future, demand for kava from Ambae is likely to continue to rise, although as noted in the case of Malakula there is already a problem of oversupply.

5.2.4 Livestock production

Campbell (1985) and Rodman (1987) do not discuss livestock production as a source household revenue in 1980. In the case of Mota Lava, Campbell (1985) does indicate that there were some cattle on the island and suggests that this number would grow in future. In line with this observation, the 1985 smallholder survey indicated that none of the cattle raised on the island were sold to abattoirs or to villagers on the island (Republic of Vanuatu, 1985:20-21). The survey showed that the total cattle population on the island was only 29, which were held in five paddocks (Republic of Vanuatu, 1985:8). By the early 1990s numbers of cattle had declined further. Only a few households in Nerenigman village owned cattle which were raised in the two paddocks on the island. The rest had ceased owning these animals.

In Longana on the other hand, livestock production appear to have been an important source of revenue in 1980 since Rodman (1987:114) remarks that selling cattle also generated as much income for some households as they gained from copra sales. In 1982 the price for a cattle beast was about $A50 for a mature animal and in some parts of the district cattle were killed once a week for special celebrations. Thus it is possible that rural villagers were also selling the product for cash, although in Longana the primary function of cattle was simply as plantation "lawn movers" (Rodman, 1987:106). In 1991 the total number of cattle owned by households included in the survey was 157. This represented about four animals per household (Table 5.9).

Pigs and chickens have always played an important role in the subsistence diet of the rural population of Vanuatu. In Ambae, pigs are regarded as a sign of wealth and are an essential component of rituals of marriages and grading feasts. In Longana "pig killing" ceremonies are still conducted at major custom celebrations to achieve status (Republic of Vanuatu, 1986:2.1-2.2). In Longana, owning pigs is related to the distribution of land. Those individuals who have more pigs to contribute to the funerary feasts, are those who know the most about the history of the land, and who are articulate in defense of their own claims to this land.

While pig ownership in Longana is partly influenced by a need for particular social purposes, external demands for cash to meet the cost of basic consumer goods from the trade stores as well as payment for social services are also factors influencing pig ownership. A rural villager in Longana can raise pigs for sale and also to meet custom requirements such as those cited above. Table 5.9 contains an inventory of several kinds of animals owned by households in Nerenigman village and in Longana in 1991.

Table 5.9: An inventory of animals owned by households in Nerenigman village and the Longana area, 1991

Type of animal	Nerenigman village No. owned	%	Average no. per HH.	Longana area No. owned	%	Av. no. per HH.
1. Pigs	24	6.6	0.6	282	31.5	8.0
2. Cattle	38	10.4	0.9	157	17.5	4.0
4. Chickens	267	73.4	6.4	426	47.6	12.0
5. Ducks	34	9.3	0.8	6	0.7	0.2
6. Other[a]	1	0.3	0.0	24	2.7	0.7
Total:	364	100.0		895	100.0	

Note: [a] Other includes goats.

Source: Household survey, 1991.

Nerenigman does not deviate very much from the original pattern of pig and chicken ownership in the Banks/Torres region where households on average owned at least one pig and nine chickens (Republic of Vanuatu, 1990:30-31). This same survey indicated four pigs and 29 chickens per household for the Ambae/Maewo Local Government Region. While these average figures differ considerably, it is possible to suggest that livestock rearing has become a significant form of cash generating activity within some rural households in the Longana area. Table 5.10 shows income generated through livestock sales in the case study areas.

During 1991 livestock sales generated 28 percent of the total income recorded for rural households in Longana. It was the second largest cash earner in addition to either kava or copra. This compares with only 12 percent in the case of Nerenigman. In 1991 the price for a mature cattle beast was around 15,000 vatu. Given this high price it is interesting to speculate why more cattle are not raised for sale on Mota Lava especially.

Table 5.10: Value of income from sale of livestock in Nerenigman village and the Longana area, 1991

Village	No. of HHs. selling	%	Total income (vatu)	%	Rev./HH. (all HHs.) (vatu)	Rev./HH. (prod./HH.) (vatu) Mean	SD	CV (%)
Nerenigman	13	31	17,590	12.2	418	1,350	1,360	101
Longana	21	60	265,900	28.4	7,597	12,662	14,303	113

Source: Household survey, 1991.

Looking after cattle on Mota Lava created certain problems for their owners. Incidents were cited by respondents of damage caused by unfenced cattle to village food gardens. The result of such damage was a demand for compensation payments of 50 vatu to the garden owners for every foot print left by an animal on a yam or other food mound. If the damage was serious, it could cost the owner substantial amounts of cash as compensation. This situation was also true in the case of pigs raised by a household.

Largely because of this problem, there was no interest shown by the villagers in raising cattle, although it provided a significant source of meat at village feasts. They were slaughtered and used in certain village ceremonies such as marriage and burial feasts. Looking after cattle for sale was very much a secondary objective. When cattle were not available on the island to meet these purposes, villagers purchased them from Vanua Lava.

5.2.5 Other sources of income

It is impossible to determine for the early 1980s the amounts of household income which were derived from other sources such as wages, remittances and hire of household items. Neither Campbell (1985) nor Rodman (1981) collected such data. Campbell (1985:139) indicates that, in the case of Mota Lava, household income from sources external to the island were common. Reference is made to public servants working in institutions such as schools, a dispensary and the airport. These people indirectly injected some income into the island economy, through purchases of goods from the co-operative stores and purchases of garden food crops from the villagers. In addition, remittances from relatives working outside the home island were also received, although no specific data are available to determine the importance of this source for the rural households. Campbell (1985:154) points out that there was little direct evidence during his field inquiries of remittances from relatives working in Port Vila or in Santo. The situation in Longana in the early 1980s also cannot be assessed satisfactorily due to lack of data for this purpose.

While it was possible to estimate the cash incomes generated by households through such activities in the study area, it was not possible to quantify the flows of remittances from relatives working outside of the island. Western-type consumer goods such as bread, sugar, clothes, rice, flour and tobacco were common products remitted in return often for various food products and vegetables, mats and livestock sent by villagers to relatives working in the main urban centres. There existed an established relationship between relatives who are wage earners at the core and the rural dwellers on the periphery. This observation reinforces findings by Bastin (1985) for Weasisi village on Tanna in Vanuatu; Bayliss-Smith et al. (1988) for the eastern islands of Fiji; and Carrier (1992) for the Ponam society in the Manus Province of Papua New Guinea.

Some cash income was also received by individuals in certain households through wages from employment as casual labourers in Government Department offices. This was particularly relevant in Longana. Members of some households worked at the District Hospital in Lolowai and the Ambae/Maewo Local Government Council headquarters at Saratamata. Some also commuted from their villages to work with the Department of Agriculture, Livestock and Horticulture (DALH) at Saratamata as agricultural extension officers.

Local residents obtained some monetary benefits from casual wage employment in rural projects such as road maintenance and construction. These projects are discussed further in Chapter Six. Funds that were injected by the national government for development purposes also indirectly benefited the rural dwellers through employment.

In Longana only a small proportion of households participated in cash generating activities other than copra, kava and livestock production and wage employment. In Nerenigman village two households derived income from hiring household items. Both of these household members had previously worked as civil servants outside of the island. They were actively involved in the hire of items such as a lawn mover and a video machine. Otherwise revenue raised from this source was minimal.

The numbers of households selling fruits and nuts was 24 (57 percent) for Nerenigman village and 27 (77 percent) in Longana. The reason for the high proportions of households selling these products is the abundant supplies of various fruits and nuts found in both areas, a point emphasised earlier in section 5.1. Many households planted these trees with the specific objective of obtaining fruits and nuts for domestic use as well as for sale, although receipts tended to be very low.

In Nerenigman village coconut crabs, lobsters and a variety of shellfish and live marine organisms were occasionally sold in the village market for cash. Small fish were also widely harvested in the lagoons during low tides. While there is an abundance of marine resources on the fringing reefs of Mota Lava and Ra island, development on a commercial basis has been limited. During the field studies there were no members of households who fished on a commercial basis despite attempts by the Fisheries Department in the past to distribute fishing equipment with this type of enterprise in mind. This was part of a fisheries extension programme based in Sola on Vanua Lava. Such equipment included a fish cooler which is no longer used because it is not operational.

The sale of garden produce and handicrafts, and the hire of household items, such as portable power generators and sewing machines, generated some minimal income for households in Nerenigman village. Revenue raised from the sale of garden food crops in the village was usually small due to the small number of wage earners on the island. The only wage earners on the island were five teachers from the two community schools and two staff members of a dispensary located at Nerenigman village. This situation is no different from that observed by Campbell (1985:139) in the early 1980s. These regular wage earners were not frequent purchasers of food from the village market. This was because the villagers also provided food to them on a fortnightly basis. When cash payments were not involved, a system of barter was the dominant means of exchange.

The most frequently bought food items in the market were fruits and nuts eaten as snacks. Various types of cooked food such as small fish wrapped in green banana leaves, mashed tubers and breadfruit pudding coated with coconut cream (*nalot*) were favourite items among the buyers. Although both the men and women were involved in preparing these food, the dominant sellers, however, were usually women. Average cash income generated from the sale of garden food produce in the market rarely exceeded 500 vatu per market session per household.

A more lucrative type of household activity was the sale of baked bread. Both men and women were involved in baking bread and there seemed no division of labour among the household with regard to running the activity. The field data indicated that there were 11 bread ovens on Mota Lava and Ra island. These bakeries used imported ingredients and the price charged was 80 vatu per loaf. They represented about nine percent of all enterprises and other socio-economic infrastructure located on Mota Lava.

Sale of handicrafts such as wood carvings, baskets, fans, brooms and mats was not a significant source of income generation. This was because households in Nerenigman village made most of these handicrafts from parts of coconut leaves and bush ropes for household use only. However, when opportunities did arise some of them were sold to fellow villagers. Income raised from the sale of various handicrafts by a household was also usually minimal.

Another food resource which was not well tapped and which has a potential for sale outside of the island is dried breadfruit, commonly referred to as "island biscuit" by the islanders. The people of Mota Lava in the past have developed traditional systems of food storage. Some of the different techniques used by the islanders in these types of food storage are described by Campbell (1985:180-181). Dried breadfruit is one of these food items and traditionally served as cyclone relief and provided sustenance during seasonal periods of low food availability. It can last for many years without going bad. If a potential market is found for this product elsewhere in the archipelago, it could become a viable income generating project given the abundant supply of breadfruit and other nut trees on the island. However, since these fruits and nuts are seasonal their supply and potential to generate income will invariably depend on the seasons as well. There is also the question of storage. The dried breadfruit has to be kept in a hot place (example, above a cooking place).

The capacity for various households to generate revenue in fresh produce markets in Longana is greater than in Nerenigman, largely because of the greater number of wage and salary earners in the neighbouring area. The main market activity for villagers in the study villages, which also included neighbouring villages, was held at Longana airport. From the point of view of buyers, tubers, fruits and vegetables of various varieties were sold at a reasonable price. Most buyers in these markets included the villagers and wage earners from Lolowai and the Saratamata Local Government Council. It was not always possible for sellers to market all the food at any one time, an experience not too different from that in Nerenigman village. A successful sale of food produce was dependent on the number of buyers present at the airport. The unsold food was brought back home for household consumption or was returned for sale during the next market day.

5.3 Rural change since independence: evidence from case studies

Campbell (1985) and Rodman (1987) have provided valuable insights to aspects of village economies in the early 1980s. Using these sources as bases for assessing trends since independence it is clear that village economies have undergone some transformation. This transformation has been particularly prevalent in population characteristics and wealth generating capabilities of villages included in the survey. It is difficult to analyse these changes in detail because data on migration were not available at the village level. However, it seems that these two areas have experienced substantial emigration during the 1980s.

A second general observation is that there has been some diversification of income generating activities, especially in Longana. Copra remains the mainstay of Mota Lava's cash economy, but kava and livestock production have become major sources of revenue on Ambae.

One indicator of rural prosperity in the case study villages during the 1990s is the size of household incomes. Sofer (1992:123) states that "cash income is an indicator of the affluence of villagers", although using cash incomes alone cannot provide an adequate are index of welfare (Bayliss-Smith et al., 1988:207). Other indices such as health, housing and social amenities are also important considerations.

5.3.1 Income distribution among the households

It is now appropriate to assess income distribution among the different households in the case study areas. This assessment provides a perspective from which household prosperity can be evaluated. While income per household is used as one measure of rural prosperity within the different households in question, it is also a valid indicator of a presence of likely social differences that may arise from factors associated with cash-cropping activities. The question of access to land for subsistence gardening and coconut groves is very relevant here. The land tenure systems, and how these affect copra production in Longana are covered in detail by Rodman (1981, 1984 and 1987).

Aggregate summaries of household income sources in Nerenigman village and Longana are given in Tables 5.11 and 5.12. These tables show total income from each major source for all households, mean income per household, mean income per producing household, the spread of these incomes among the different producers and the coefficient of variation.

The number of households that were selling various products for cash income ranged from as low as five hiring their belongings to the fellow villagers to a high of 24 households who sold fruit and nuts. Income derived from these environmental sources also varied. The most popular form of household activity, regardless of how much revenue was generated, included collecting fruits and nuts (57 percent) and selling fish products (47 percent). Copra and handicraft production were equally important and 40 percent of households took part in these activities.

When total income from the sale of these various products is considered, copra and hire of household items generated more revenue than other sources. The percentages of total income coming from these sources to the households were 21 percent from copra and 18 percent from hire of household items. However, if the two households (former civil servants) who hired out lawn mowers and a video machine to the fellow villagers are excluded from the calculation, the percentage of total income coming from this source sinks to only 0.9 percent. The extent of the spread of this data is revealed by its standard deviation of 8,000 vatu with a coefficient of variation at 150 percent.

Table 5.11: Income sources for households in Nerenigman village, January to July, 1991

Income source	No. of selling HHs.	%	Total income (vatu)	%	Rev./HH. (all HHs.) (vatu)	Rev./HH. (prod.HH.) (vatu) Mean	SD	CV (%)
1. Copra	17	40.5	31,800	22.0	757	1,870	1,530	66
2. Livestock	13	31.0	17,590	12.0	418	1,350	1,360	101
3. Handicrafts	17	40.5	18,860	13.0	449	1,109	2,270	205
4. Fruits & nuts	24	57.1	14,400	10.0	342	600	590	98
5. Labour hire	6	14.3	1,330	1.0	31	221	350	159
6. Fish products	20	47.6	19,480	13.5	463	974	1,460	152
7. Hire of HH. items	5	12.0	26,650	18.4	634	5,330	8,000	150
8. Kava	5	12.0	2,900	2.0	69	580	360	62
9. Others[a]	3	7.1	11,700	8.1	278	3,900	4,460	114
Total:	42		144,800	100	3,477	3,712	4,639	125

Note: [a] Others include hire of suit for marriage (1 household), sale of shell money (1 household) and coconut crabs and cray fish (*naura*) (1 household).

Source: Household survey, Nerenigman village, 1991.

When all households included in the survey are considered, there was variation in revenue per household which ranged from the lowest 31 vatu per household coming from labour hire to a high of 757 vatu per household from copra sales. These figures suggests that the main income generator for households in Nerenigman village revolved around copra production, although other sources were also tapped and are important when assessing cash incomes as an indicator of rural prosperity.

Campbell's (1985) observation that copra was a dominant cash earner in the early 1980s remained valid in early 1991. While information contained in Table 5.11 refers only to a recall period of six months only, the total annual copra production on Mota Lava, between early 1990 and early 1991 was 9,975 kilograms with a value of 143,609 vatu. This total was produced by 41 households (97.6 percent). The mean production per producing household was 238 kilograms with mean cash receipts of 3,504 vatu.

A comparison of income sources for Nerenigman village with households in Longana reveals some interesting features. Sources of income for Longana's households are given in Table 5.12. Kava, livestock and copra certainly stand out as the main sources of revenue for households in the Longana area. No other source of income generated more than 10 percent of the total. Between 60 and 77 percent of households, including the sellers of fruits and nuts, were involved in these activities. It is interesting to note from these figures that kava brings in about 32 percent of revenue into the village economy. Livestock sales are also more important than copra in aggregate.

Revenue per household ranges from 74 vatu to 8,000 vatu. When mean figures per producing household are considered, kava fetched about 14,000 vatu per household, livestock 12,000 vatu and copra 6,000 vatu. The mean figure of 15,333 vatu for categories included under "other" is because one household sold about 41,000 vatu worth of hot food during the independence celebration in 1991 (Table 5.12).

The total volume of copra sold between April and October, 1991 was 14,840 kilograms, with an average for the producing households of 449 kilograms. This generated total cash receipts of 170,040 vatu, with an average income for the producing households of 5,152 vatu. These amounts only relate to the small producers and therefore do not illustrate the actual production by large landholders who also perform middlemen roles.

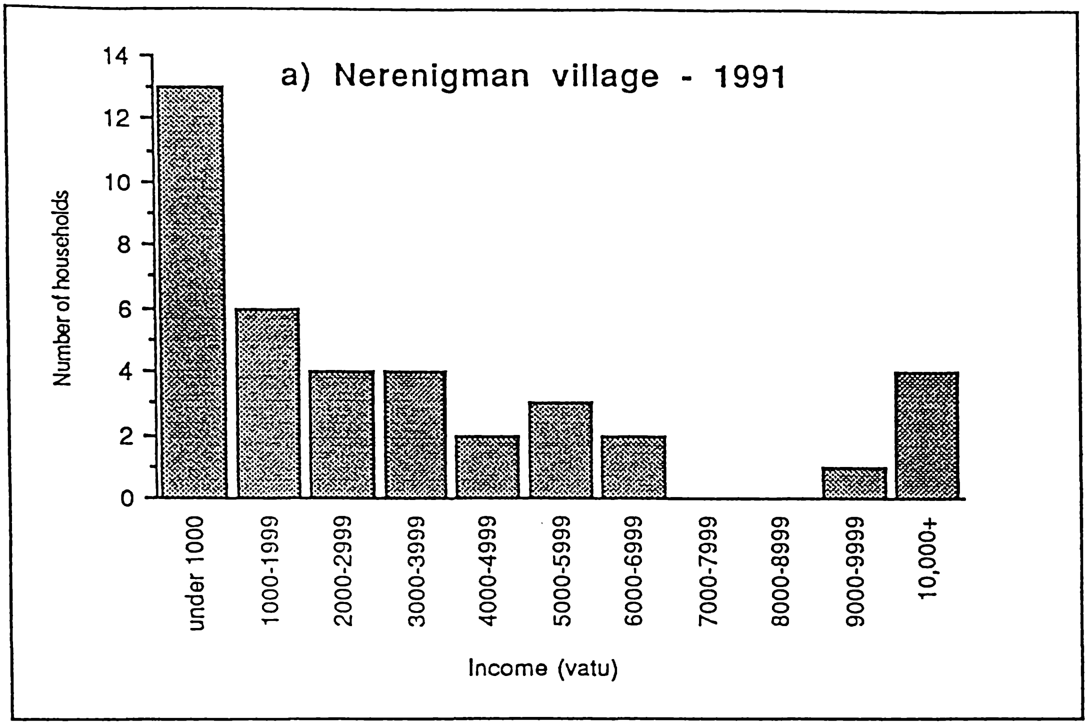
Table 5.12: Income sources for households in the Longana area, April to October, 1991

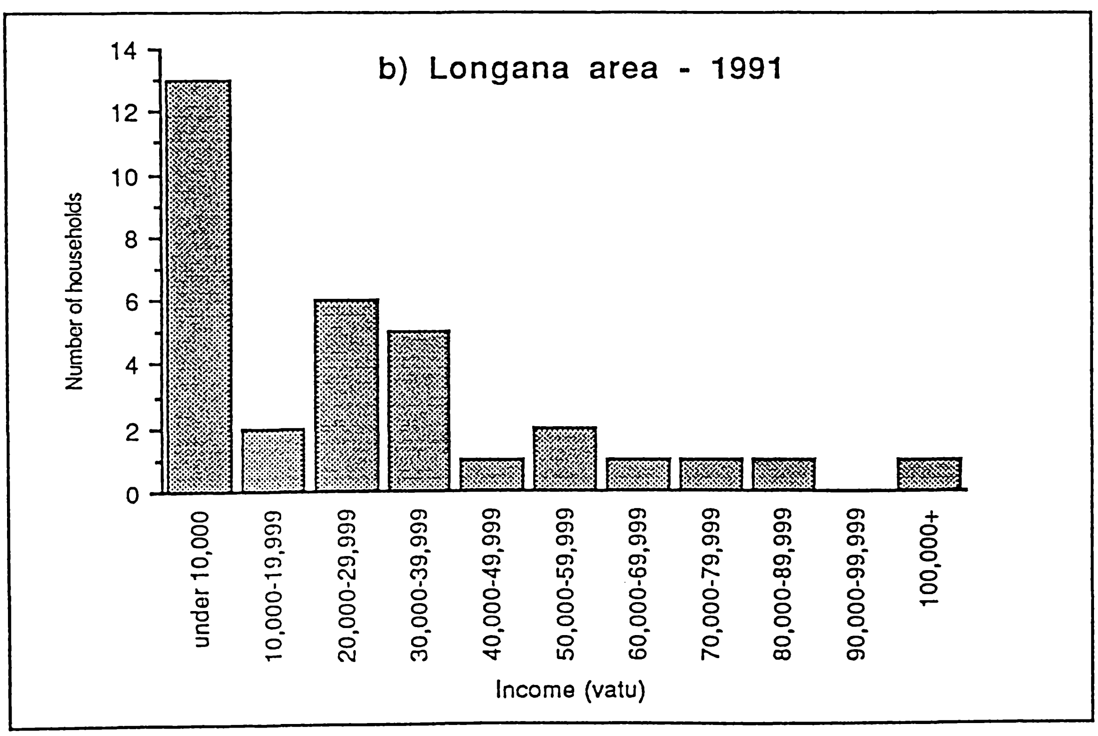
Income source	No. of HHs. selling	%	Total income (vatu)	%	Rev./HH. (all HHs) (vatu)	Rev./HH. (prod./HH.) (vatu) Mean	SD	CV (%)
1. Copra	25	71.4	170,040	18.1	4,858	6,801	5,010	70
2. Livestock	21	60.0	265,900	28.4	7,597	12,662	14,303	113
3. Handicrafts	5	14.2	16,900	1.8	482	3,380	3,670	108
4. Fruits & nuts	27	77.1	84,800	9.0	2,422	3,142	3,180	101
5. Labour hire	5	14.2	11,200	1.2	320	2,240	1,590	71
6. Fish products	5	14.2	35,000	3.7	1,000	7,000	6,693	96
7. Hire of HH. items	3	8.6	2,600	0.3	74	866	810	94
8. Kava	21	60.0	304,600	32.5	8,702	14,502	13,170	90
9. Other[a]	3	8.6	46,000	4.9	1,314	15,333	38,250	24
Total:	35		937,040	100.0	26,772	28,395	28,081	99

Note: [a] Other includes income generated from food stalls and sale of clothes only.

Source: Household survey, 1991.

The spread of income among all households included in the survey and those which actually produced the products can be best understood by interpreting the mean income, the standard deviation and coefficient of variation. The spread of this data can be usefully illustrated by use of a graph such as that shown in Figure 5.10. It should be noted from this graph that the scale for income for Longana is 10 times that for Nerenigman, a reflection of quite different magnitudes of household cash incomes in the two areas.





Source : Household survey, Nerenigman village and Longana area, 1991

Figure 5.10 : Frequency distribution of income for households in Nerenigman village and the Longana area, 1991

Figure 5.10 confirms that income distribution among the rural households in Nerenigman village and hamlets in the Longana area is not normal. Income distribution in both areas is negatively skewed suggesting that there was a high proportion of households generating comparatively low incomes from various sources. The other interesting feature, which has already been noted, is that revenue received by households in Longana was much greater than that recorded in Nerenigman. The differences are due in large measure to the roles of kava and livestock production in Longana - rural activities which, in 1991, were producing sizable cash returns for households.

5.4 Conclusion

An examination of cash-generating economic activities by rural dwellers in Nerenigman village and the Longana area indicates that copra production was the dominant source of cash incomes in the early 1980s, and remained an important source in 1991. In Longana, kava and livestock production had become much more important activities during the 1980s. These communities had undergone a major transformation in terms of cash-generating activities. Nerenigman, on the other hand had not changed much, at least in so far as the cash economy was concerned. The post-colonial experience of households in this village is captured most graphically by Howlett's (1973) evocative phrase, the "infinite pause", which she used to describe development in a valley near Goroka in the early 1970s.

The reality of post-colonial economic change in Nerenigman village, and Mota Lava as a whole, is that opportunities are limited for rural dwellers to diversify their sources of cash income with a view to improving their material welfare. The mean cash income generated over a six month period from all sources by the 42 households in Nerenigman was only 3,447 vatu. On the other hand, the mean cash income for the 35 households included in the survey in the Longana area was 26,772 vatu.

In both areas, the income distribution per household is significantly skewed. This phenomenon is not only to be explained in the context of market forces, but is also embedded within the land tenure system inherent in these two case study areas. People who had access to large areas of customary land grew coconuts from which copra was produced. They also used their own land to cultivate various food crops which, were in turn, were sold in the market for some cash. The control of land and access to its use for various household requirements is not equal, and this factor must be taken into consideration when interpreting household income data. The income of the civil servants also adds to the imbalance.

The experience of post-colonial economic change in the Longana area seems to have been positive. Households in Nerenigman village on the other hand, do not seem to have advanced much in terms of material well-being. Due to the geographic isolation of Mota Lava the potential towards establishing alternative routes to rural prosperity is limited. In large measure it rests on the national government's strong commitment to see that its objective of "balanced" rural and regional development becomes a reality rather than remaining planning rhetoric.

CHAPTER SIX

DEVELOPMENT INFRASTRUCTURE

Efficient infrastructure, such as transport and viable commercial enterprises can act as catalysts for development. They are often cited in the "development" literature as being prerequisites for successful integration of rural dwellers into a modern cash economy. In addition, schools, hospitals, water supply systems, telecommunication and power reticulation networks are frequently associated with "development". This Chapter compares the sorts of infrastructure available on Mota Lava and in Longana around 1980 with that present in the early 1990s.

6.1 An assessment of socio-economic infrastructure in the 1980s and 1991

It is important at the outset to define more clearly what is meant by the term "infrastructure". In the following assessment three types of infrastructure were identified: capital assets, amenities and utilities. A capital asset was defined as any item of equipment or enterprise owned and used by an individual household or a village community in some form of "development" activity. A basic requirement was that the asset was used to generate revenue. Such assets included copra driers, outboard motors, speed boats, video sets, portable power generators and bakeries. Some of them were hired out to fellow villagers for small fees. Certain items were shared within the community. It was also possible to list other capital assets used by households which were not necessarily generating cash income. Fishing nets are an example of this type of item, although the users of nets were usually expected to share some of their catch with the owners of them as a gesture of thanks.

Amenities included community facilities, such as schools, dispensaries, church buildings, community halls, while utilities included water wells, tanks, telephones and postal services used by households or by the village community at large. These amenities and utilities were associated with improvements in the quality of life in rural areas.

6.1.1 Mota Lava 1980 to 1991

Table 6.1 presents a summary of capital assets, amenities and utilities on Mota Lava in 1980. The inventory has been constructed from information provided by residents in 1991. Campbell (1985) did not include this type of information in his study for the early 1980s.

Table 6.1: An inventory of assets, amenities and utilities on Mota Lava, 1980-1991

Items	1980[a]	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	Tot
Assets													
Co-ops.	3	-	-	-	-	-	-	-	-	-	-	-	3
Trade stores	1	-	-	1	-	1	-	3	1	1	7	2	17
Speed boats	2	-	-	-	-	-	2	1	-	1	2	1	9
Motors	1	-	-	-	-	-	-	1	2	-	1	1	6
Power gen.	-	-	-	-	-	-	-	-	-	-	-	2	2
Video sets	-	-	-	-	1	-	-	-	-	-	-	1	2
Bread ovens	3	1	-	-	-	1	3	2	1	-		-	11
Copra driers	-	-	-	-	5	1	1	-	-	-	-	1	8
Copra depot	1	-	-	-	1	1	1	-	1	1	-	-	6
Kero. depot	1	-	-	-	-	-	-	-	-	-	2	-	3
Amenities/utilities													
Schools	2	-	-	-	-	-	-	-	-	-	-	1	3
Dispensary	1	-	-	-	-	-	-	-	-	-	-	-	1
Water tanks	2	-	-	3	1	4	1	3	-	1	1	1	17
Water wells	15	-	-	-	-	-	2	3	1	-	2	-	23
Telephone	-	-	1	-	-	-	-	-	-	-	-	-	1
Total	31	1	1	4	8	7	10	12	6	5	15	9	112

Note: [a] also includes earlier years.

Source: Field inventory, Mota Lava, 1991.

About 66 percent of the capital assets, amenities and utilities shown in Table 6.1 as present on the island in 1991, were established after 1984. Some interesting features are revealed. After 1984 many trade stores were established and the number of water tanks, bread ovens and hot-air copra driers built on Mota Lava also increased. The extent to which income earned by households from copra sales and other sources discussed in Chapter Five contributed to the development of this infrastructure cannot be quantified. However, it is worth recalling that between 1984 and 1987 copra sales to the QRTV Co-operative Store and the total income earned from the sale of copra were at their highest levels during the 1980s. Income earned by households on the island from sales to this co-operative store reached 3,653,674 vatu in 1985 (Table 6.2). This influx of cash encouraged some households on Mota Lava to build water tanks, copra driers, bread ovens and establish trade stores (Table 6.1).

Table 6.2: Copra sales to the QRTV Co-operative Store, 1984-1990

Year	Total production (kgs.)	Total income (vatu)
1984	66,221	2,575,119
1985	113,915	3,653,674
1986	61,985	1,372,253
1987	109,812	1,851,015
1988	69,763	1,684,021
1989	7,166	187,440
1990	22,928	475,997

Source: QRTV Co-operative Society Store, Mota Lava, 1991.

It is evident from Table 6.1 that there was quite a significant infrastructure base on Mota Lava in 1980 according to information provided by villagers in 1991. Around 30 percent of all of the assets, amenities and utilities listed in the table were established before independence. It is also clear from Tables 6.1 and 6.3 that ownership of small trade stores and facilities associated with copra production increased significantly after 1981. This is associated with high copra incomes referred to above.

Table 6.3 gives an indication of rural dwellers' access to infrastructure. Access is defined as the ratio between the number of assets, amenities and services present and the total number of households. In the case of Mota Lava, the number of households listed in the 1979 Census was 212 and it was 200 in 1989. These census figures are used to approximate the numbers of households present in 1980 and 1991. Access in this context is not a geographic measure in the sense of proximity, but rather the ratio gives a crude indication of the number of households served by each asset, amenity and utility.

Table 6.3: The ratio of households to items of infrastructure on Mota Lava and Ra island, 1980 and 1991

Items[a]	1980 and earlier	Between 1981 and 1991	Total number in 1991	No. of HHs./ item 1980	No. of HHs./ item 1991
Assets					
Co-operatives	3	0	3	71	67
Trade stores	1	16	17	212	12
Speed boats	2	7	9	106	22
Outboard motors	1	5	6	212	33
Telephone service	0	1	1	n.a.	200
Power generator	0	2	2	n.a.	100
Video sets	0	2	2	n.a.	100
Bread ovens	3	8	11	71	18
Copra driers	0	8	8	n.a.	25
Copra depot	1	5	6	212	33
Kerosene depot	1	2	3	212	67
Amenities/utilities					
Schools[b]	2	1	3	106	67
Dispensary	1	0	1	212	200
Water tanks	2	15	17	106	12
Water wells	15	8	23	14	9
Total:	32	79	112	7	2

Notes: [a] Establishment dates of some amenities and utilities, such as the bank (1), tele-radio system (1), post office (1) and a kindergarten (1) were not collected and therefore have been omitted from inclusion in the above Table.
[b] includes two kindergartens and two community schools.

Source: Field inventory, Mota Lava, 1991.

On the whole, the average number of households per facility improved from around seven in 1980 to less than two in 1991. When ratios of households to trade stores, bread ovens, water tanks and wells are compared for 1980 and 1991, it is apparent that there was a significant improvement during the first decade of independence. For example, trade stores and water supply systems showed a reasonable index of household access. On the other hand, the availability of community services, such as telephones, schools and a dispensary has not changed. This is not surprising because Mota Lava's population has not increased during the 1980s. Indeed, as is shown later in the Chapter, the quality of some of this infrastructure (especially with regard to schools) declined significantly after independence.

It was not possible to measure the frequency of use of the infrastructure listed in Tables 6.1 and 6.3. For example, Table 6.3 indicates that in 1991 12 households had access to one store. This does not mean that only 12 households would be buying their goods from this store at any one time. A buyer's decision to visit a particular store depends on a number of factors, such as income that can be used to purchase various consumer goods, the range of goods sold in the store, the distance customers covered when walking to a store, and price differences for the same bundle of goods between stores. The index used here only indicates the potential access of the island population or households to the services listed; it does not describe consumer behaviour of individual households.

6.1.2 Longana area 1980 to 1991

In the case of Longana, Rodman (1987:108) points out that in 1978 there were six operational cocoa fermentaries. One of them belonged to a co-operative society. In 1991 this fermentary was still in use. It is located at Wailengi and is run by Hilehile Co-operative Society.

In 1982 the Department of Agriculture (now the Department of Agriculture, Livestock and Horticulture) recommended that one good improved smoke drier was to be used by every ten growers (Department of Agriculture, 1982:3, cited in Rodman, 1987:92). The objective was to improve the quality of copra produced. Since the early 1980s copra producers in Longana have made some progress in constructing improved copra driers so that by early 1991 there were 21 driers present in the case study area (Table 6.4). The ratio was two households for every copra drier (Table 6.5). This was well above the number recommended by the Department of Agriculture in the early 1980s.

Table 6.4: An inventory of assets, amenities and utilities in the Longana area, 1980-1991

Items	1980	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90	'91	Tot
Assets													
Trade stores	1	-	-	-	-	-	-	-	-	-	-	-	1(4)
Copra driers	4	-	2	-	2	2	4	1	1	-	-	1	17(4)
Copra depot	-	-	-	-	-	-	-	-	-	-	-	1	1
Block machine	-	-	-	-	1	-	-	-	-	-	-	-	1
Amenities/utilities													
Schools	1	-	-	-	-	-	-	-	-	-	-	-	1(1)
Water tanks	2	-	1	-	1	-	-	-	-	-	-	-	4(10)
Water wells	2	-	1	-	1	-	-	-	-	-	-	-	4(5)
Guest house	-	-	-	-	-	-	-	-	-	-	1	-	1
Total:	10	0	4	0	5	2	4	1	1	0	1	2	30(24)

Notes: Figures shown in the brackets refer to the number of other infrastructure items for which dates of establishment were not recorded during the survey. In addition there were also two trucks (2) and four bread ovens (4) which were used by villagers in the case study area. When these are included total number comes to 60. The 1980 column also includes earlier years, while the number which refers to the school covers one community school and a kindergarten.

Table 6.4 reveals that there was a high incidence of copra driers, water tanks and wells in the Longana area in 1991. Five copra driers in the Navonda area were also constructed between 1984 and 1991 (Jimmy Garae, household survey, Longana, 1991). The reason for the low number of water tanks and wells in the area is associated with the installation of proper water taps after 1986 in five settlements. They include Halava, Mataravi, Lolosara, Lovunbise, Navonda and Atavoa. This project was funded through AIDAB and the New Zealand bilateral aid programme (Household survey, 1991). In Longana there is a reasonable index of household access to copra driers, water tanks and wells (Table 6.5).

Table 6.5: The ratio of households to items of infrastructure in the Longana area in 1980 and 1991

Items	1980 and early years	Between 1981 and 1991	Total number in 1991	No. of HHs./ item 1980	No. of HHs./ item 1991
<u>Assets</u>					
Trade stores	1	n.a.	5	52	10
Copra driers	4	13	21	13	2
Copra dock	0	1	1	n.a.	51
Block machine	0	1	1	n.a.	51
<u>Amenities and utilities</u>					
Schools	1	n.a.	2	52	n.a.
Water tanks	2	2	14	25	4
Water wells	2	2	9	25	6
Guest house	0	1	1	n.a.	51
Total:	10	20	54	5	1

Note: Total number of households recorded during the 1979 National Census in this Enumeration Area (E.A.) was 52 and in 1989 it was 51.

Source: Field inventory, Longana, 1991.

While the above data are only relevant for those villages included in the survey, there are some major services and facilities used by villagers outside the boundaries of the study area. These were concentrated around Lolowai and the Ambae/Maewo Local Government Council headquarters at Saratamata. The main stores which handle the area's external and internal commercial activities to the island are concentrated in this district. A post office and a telephone system are located at Lolowai, along with a district hospital, three banking agencies, three main stores and institutions, such as the vocational training centre, Torgil Mission College for training of local Anglican priests.

From the field inventory conducted in 1991, there were 60 different types of facilities and amenities listed in the Longana area (Table 6.4). This represents about one facility per household. However, nearly 70 percent of them were concentrated around the large settlement of Navonda. This is partly explained by the fact that most communal activities of households included in the survey were conducted there (section 5.1.3 of Chapter Five). The settlement is centrally located with reference to its neighbouring hamlets. Copra cutting by some households also took place in this area.

A second reason for this spatial concentration of infrastructure is that there was a clustering of more "affluent" households in Navonda. The large number of copra driers located in Navonda was due to the fact that 47 percent of all households included in the case study lived here and their involvement in copra production was also dominant. Respondents claimed that producers from neighbouring hamlets also used the drying facilities located in Navonda on a communal basis.

Rodman (1987:90) points out that producers in the early 1980s were also using copra driers owned by large landholders after seeking the permission of the owner. A payment of two to three dollars from the producer was received for use of the building. This situation continued to prevail in late 1989 and early 1991. For example, at the level of the Local Government Region, rent paid for the use of driers in Ambae/Maewo was 104 vatu per bag for hot air dried copra and 57 vatu per bag for smoke. By comparison, the average rent households in the Banks/Torres LGR paid for the use of a hot air drier was 126 vatu per bag, and for smoke dried copra it was 166 vatu per bag (at a national level they were 101 vatu and 79 vatu respectively) (Republic of Vanuatu, 1990:26-27).

6.1.3 Mota Lava and Longana compared, 1991

It is now useful to compare some elements of Mota Lava's infrastructure data with the case study area in Longana for the early 1990s. In making this comparison it is important to note that data for Mota Lava covers the whole island while the situation for Longana is different. Hamlets included in the survey were spread over a land area of 11 square kilometres, not the whole of the Longana area. Despite this difference, which is attributed to the spatial coverage of the surveys on the two islands, information presented in Table 6.6 give some indications of the extent to which households in the two areas had access to assets, amenities and utilities of different types in 1991.

Table 6.6: Mota Lava and Longana: access to infrastructure compared (selected items only), 1991

Items	Number of households per asset, amenity and utility	
	Mota Lava	Longana area
Assets		
Trade stores	12	10
Bread ovens	18	13[a]
Copra driers	25	2
Copra depot	40	51
Amenities/utilities		
Schools	50	26
Water tanks	10	4
Water wells	11	6
Church buildings	29	26

Note: [a] There were a total of four bread ovens in Longana area. They were not included in an inventory of development infrastructure in Table 6.4.

Source: Field inventory, Mota Lava and Longana area, 1991.

In both areas the number of households served per trade store is similar even though the percentage of all infrastructure items listed which are stores is much higher on Mota Lava than in Longana (15 percent compared with 8 percent). In the case of water supply systems, Longana households have better access to tanks and wells than those on Mota Lava, and there is a much higher incidence of bread ovens and copra driers among households in Longana than on Mota Lava. Both areas also have in existence major facilities, such as co-operative stores, telephone services, power generators and post offices.

As noted in Chapter 5, rural prosperity cannot be measured in monetary terms only. The availability of amenities, such as schools and medical facilities also capture the essence of rural progress at a community level. The provision of good health services is usually a prerequisite for improving the physical well-being of members of a community. The availability of schools means that opportunities for wage employment in the main urban areas or other islands may be opened up for the educated young. The next section of the Chapter presents an overview of these services on Mota lava and in Longana. One reason for including the discussion on health and education facilities is to illustrate difficulties of continued funding of infrastructure created by the Condominium administration during the post-colonial era.

6.1.4 Health and school facilities

Health

The existence of primary health care facilities on Mota Lava is in line with the national government's policy objective "to attain better health for all...through the application of primary health care strategies" (Republic of Vanuatu, 1989:383). There is a dispensary located in Nerenigman village. It was initially established as an aid-post in 1962 and in 1965 it became a dispensary. At that time the buildings were mainly constructed out of traditional materials. Local residents from nine villages located on Mota Lava and Ra island come to this centre to seek medical advice. In 1991 the dispensary comprised one Western-style block building.

In early 1991 there were two ni-Vanuatu nurse practioners serving around 1240 residents (Field survey notes, 1991). These nurses provided advice on nutrition and household and village sanitation as well as regularly conducting immunisation programmes. The latter programme is directed at infants to reduce the incidence of target diseases, such as whooping cough, polio, measles, tetanus and hepatitus B. While no data exists to portray the incidence of the diseases mentioned above, information on other minor but more common diseases is available for the six months, November 1990 to April 1991 (Table 6.7). Causes of these health problems appear to be lack of proper water supply systems, inadequate sanitation and poor environmental conditions in the village (Republic of Vanuatu, 1989:390).

Table 6.7: Number of common disease cases treated at the Bemisisi Health Centre, November 1990 to April, 1991

Disease type	Number of cases
1. Skin diseases	350
2. Malaria (suspected)	265[a]
3. ARI (Acute Respiratory Infection)	117[b]
4. Eye infection	73
5. Scabies	45

Notes: [a] About 139 blood tests were conducted and the results showed that 42 cases proved positive.
[b] There were 54 cases with mild respiratory infection, 61 were treated for moderate infections and 2 were serious cases.

Source: Bemisisi Health Centre, Mota Lava, 1991.

Skin diseases were common on the islands. It is suspected that one of the main causes of this disease, among other factors, was poor water supply on Mota Lava (Zebulon, personal communication, Nerenigman village, 1991). In 1981 the main villages at the western end of the island were served by a piped water reticulation system but later fell into disrepair. While Tables 6.1 and 6.2 give the impression that a water supply system was well established on the island with around 10 or 11 households per water tank or well respectively, many of them were not in good condition in 1991. This was particularly evident in the case of underground wells.

A survey of sanitation facilities and water supply systems on both Mota Lava and Ra was conducted in 1991 by staff of the Bemisisi Health Centre. An inventory of toilets, rubbish pits and water supply systems available in each village was produced. This was part of an overall assessment of the need for an effective implementation of primary health care at a village level. Data produced during this survey are shown in Table 6.8.

Table 6.8: Number of toilets and rubbish pits on Mota Lava and Ra island as of April, 1991

Village	Pop. (est.) (1991)[a]	No. of HHs.	No. of completed toilets	No. of HHs./ toilet	No. of rubbish pits	No. of HHs./ pit
Nerenigman	316	58	31	1.9	6	9.6
Qweyemagnde	193	34	22	1.5	4	8.5
Totoglag	226	40	34	1.2	6	6.7
Rah	167	32	29	1.1	16	2.0
Var	207	42	29	1.4	7	6.0
Valuwa	74	12	12	1.0	2	6.0
Telvit	57	26	11	2.4	2	13.0
Total:	1240	244	168	1.5	43	5.7

Note: [a] The 1989 National Census, however, indicated a total resident population of Mota Lava and Ra island to be around 1047 people.

Source: Bemisisi Health Centre, Mota Lava, 1991.

Information presented in Table 6.8 is a valuable indicator of the status of village sanitation on Mota Lava. In 1991 almost every household in the village had a toilet, and on average, about 5 households used one rubbish pit. The government's national policy with regard to primary health care to some extent has been effectively implemented on Mota Lava.

The first national workshop held in Port Vila in 1984 defined primary health care as "the road leading to good, healthy and happy life through total development within the community, working together in a spirit of awareness and self-reliance" (Republic of Vanuatu, 1989:383). Strategies embodied in this programme called for preventive measures such as education concerning prevailing health problems, promotion of adequate water supplies and basic sanitation, and promotion of immunisation against infectious diseases.

In line with this strategy, in July of 1991, Mota Lava hosted a workshop centred on maternal and child health care. The workshop lasted for a week. The first workshop in the series was held on Mota island in 1989. The objectives of these two workshops were to involve the local people in primary health care activities and simultaneously implement some of the strategies specified in DP2 through a co-ordinated effort by various interest groups on the islands. During the workshop one participant stressed the importance of primary health care to the effect that achievement of this policy rested on effective co-ordination between the different interest groups such as the village chiefs, villagers, medical officers, church leaders and youth groups. Without the support of these interest groups in implementing the programme at a village level, the policy direction specified in DP2 would not be achieved.

The workshop held on Mota Lava reviewed some of the constraints facing effective implementation of primary health care programme in the villages. Village representatives reported on the progress of their first 12 month work plans which resulted from the first workshop held on Mota island. Committees had been set up in all the villages on Mota Lava and on Mota island. They reported on progress which included the construction of three tube wells which were well maintained, 14 households had proper pit toilets, and every Saturday households devoted time to cleaning the village and the surrounding environment. The villagers' ready response to improvements in village sanitation reflect the idea that improving one's living environment is an important component of a healthy and prosperous rural society.

There are no data available on toilets and rubbish pits for villages in the Longana area. It is not known whether workshops on rural health care programmes took place in Longana in the late 1980s and early 1990s because I did not collect any information on this matter during the survey. However, Dadza (1990) provides a summary of health facilities in the Ambae/Maewo Local Government Region. These data are at the level of the Area Council rather than the village. It is possible to draw some information for Ambae from his tables (Table 6.9).

Table 6.9: Health facilities on Ambae, 1988/1989

Type of institution	Nat. total (1989)	Reg. total [a]	Located on Ambae	As a % of Reg. total	Number of persons per service [b]
Hospital	5	1	1	100.0	8,583
Health centre	19	2	1	50.0	8,583
Dispensary	71	2	2	100.0	4,291
Aid post	136	13	9	69.2	954
Number of					
* doctors	18	2	2	100.0	4,291
* nurses	311	34	26	76.5	330
* beds	361	47	36	76.6	238
* cots	n.d.a.[c]	16	11	68.8	780

Notes: [a] This refers to Ambae/Maewo Local Government Region.
[b] Total resident population of Ambae during the 1989 National Census was 8,583 persons. Thus the ratio calculated in this column is based on this figure.
[c] n.d.a means "no data available".

Sources: Dadza (1990), Government of Vanuatu (1990)

The District Hospital for Ambae/Maewo Local Government Region is located in Lolowai, the main "commercial" area of East Ambae. Its proximity to the main wharf serving East Ambae also makes it a particularly suitable location since ship movements to the island from Luganville and Port Vila pass through this point.

Table 6.9 shows that well over 50 percent of all medical institutions for the Ambae/Maewo Local Government Region are on Ambae. This is explained by the number of persons per service. Out of a total of 139 aid posts in Vanuatu, seven percent were located on Ambae in 1988. Similarly, out a national total of 18 doctors, 11 percent worked in the District Hospital at Lolowai. This implied that medical services provided to the rural population on Ambae was adequate.

Education

As in other rural communities of Melanesia, access to education is regarded by ni-Vanuatu as a passage to waged employment in various sectors of the national economy. The villagers know that education for their children means progress and establishes a path towards wage employment both in government and the private sectors outside of their home villages or islands. It was noted in Chapter Five that remittances by relatives working outside of the island have contributed, in part, to children's education.

Data relating to two community schools on Mota Lava illustrates some of the difficulties inherited from the dual colonial administration. There is a French-medium school located in Nerenigman village, while an English-medium school is located at Totoglag. The schools differ in pupil numbers and teacher/pupil ratio.

The French-medium school was first established in 1972. Since its establishment and up until 1991, records indicate that 15 ni-Vanuatu teachers have taught in this school, though prior to independence teachers were mainly French nationals. In 1991 there was only one ni-Vanuatu teacher who conducted multi-grade teaching, a situation common in the French-medium schools in Vanuatu. This means that one out of every five teachers instructs more than one class (Republic of Vanuatu, 1989:411). As a result these schools record low teacher/pupil ratios.

Up until independence in 1980 student numbers enrolled in this school ranged between 160 and 200 students. Following independence this number declined to 100 pupils (Jeone, Headmaster, personal communication, June, 1991). In July 1991, there were only 32 students in the school. The variation in student numbers since the mid-1980s is shown in Table 6.10.

Table 6.10: Student enrolments at Woneski Community School from 1985-1991

Year	Males	%	Females	%	Total
1985	34	58.6	24	41.4	58
1986	n.d.a		n.d.a		n.d.a
1987	18	66.7	9	33.3	27
1988	22	64.7	12	35.3	34
1989	16	55.2	13	44.8	29
1990	16	53.3	14	46.7	30
1991	16	50.0	16	50.0	32

Note: n.d.a. means "no data available".

Source: Woneski Community School, Mota Lava, 1991.

There are a number of school-specific reasons given for declines in enrolments and the physical condition of the French-medium school. First is the attitude of parents. Parents who attended French-medium schools in the past often opted to send their children to French-medium schools. This situation was prevalent on Mota Lava during the 1980s. Secondly, prior to independence in 1980, all French-medium schools provided free meals to its pupils and therefore attracted large numbers of them to the school. However, when this "free hand-out" from the school ceased after independence, many students withdrew and instead preferred to go to English-medium schools. This pattern is well illustrated for schools on Mota Lava in Tables 6.10 and 6.11. Thus with independence came the effective demise of the French-medium school and the further development of the English medium school.

Maintenance work in the French-medium school on Mota Lava was previously done twice every year. Funding required for the general maintenance was provided by the French government since it supported its own school infrastructure during the Condominium administration. However, since independence maintenance of the school remains the responsibility of the parents or the village community. Parents' responses to these responsibilities have been minimal, which has resulted in some classrooms deteriorating. Parts of the classroom building have not been replaced or repaired since 1980. This problem is further compounded by the fact that the school was initially constructed of Western-style building materials which are not readily available for replacement on the island. The school had a power supply system and flush toilets. However, since independence these facilities have ceased to operate or are no longer in existence at the school.

During the early 1990s the presence of unused facilities at the school remind the islanders of the type of modern school infrastructure that was once available both to staff and students. In their view there has been a marked deterioration since independence in the quality of school infrastructure on the island. To carry out any major repairs would certainly require substantial funds from the national government. If this assistance is not forthcoming the school will continue to operate in poor condition.

The English-medium school at Telhei, located near Totoglag village is a sharp contrast to Woneski in terms of student numbers, teacher/pupil ratio and physical development of the school facilities. It was first established in 1966 at Var village. Initially only students in classes one to four were enrolled while classes five to eight were completed either in Port Patterson on Vanua Lava or at Torgil in Longana District. In 1966 the school was then relocated to its present location and currently has classes from one to six (Alban Maxwell, personal communication, Telhei Community School, 1991). Unlike Woneski, there were 197 students with four ni-Vanuatu teachers in 1991. No school fees were paid before 1986 and since then 2,500 vatu is paid for each child per term. There is a very strong sex imbalance in numbers of children attending the school.

Table 6.11: Student enrolments in Telhei Community School from 1986-1991

Year	Males	%	Females	%	Total
1986	95	54.9	78	45.1	173
1987	90	55.2	73	44.8	163
1988	85	56.7	65	43.3	150
1989	101	60.1	67	39.9	168
1990	116	59.2	80	40.8	196
1991	122	61.9	75	38.1	197

Source: Telhei Community School, Mota Lava, 1991.

The situation observed in Tables 6.10 and 6.11 is representative of many French-medium and English-medium schools in Vanuatu. This was noted in DP2 (Republic of Vanuatu, 1989) where it was noted that the numbers of pupils in English-medium schools increased by 46 percent between 1980 and 1986. In French-medium schools enrolments fell from 50.3 percent of total enrolment in 1980 to 37.2 percent in 1986. Teacher/pupil ratios have also been affected. Most French-medium schools have low teacher/pupil ratios, while English-medium schools have much higher ratios.

East Ambae also has a number of institutions such as one junior secondary school, one junior primary school, three senior primary schools and one vocational school. Only one senior primary school was located in the case study area. It is an English-medium school and most of its pupils are boarders. While the catchment area of Mota Lava's population is about 1,000 people, the situation in Longana differs. Ambaebulu Community School draws pupils from the Lolowai as well as Longana area. It is well maintained and has teachers resident in the school area as well.

While there has been some progress made in the promotion of general health care programmes at a village level, the situation with regard to schools has been disappointing in the early 1990s. This is particularly relevant in the context of the French-medium school where facilities and student numbers have not improved since independence. On the other hand, the English-medium school has continued to attract student enrolments in the early 1990s. Since independence there has been a significant decline in French-medium schools and some expansion in institutions teaching in English.

6.2 Transport and the island economy

Integration of island communities into the national economy is largely dependent on the transport network. Many islands in Melanesia import consumer goods from the main urban centres, as well as exporting cash crops such as copra. Sea transport is a crucial factor in the movement of these goods. As noted in Chapter Five, the archipelagic nature of the islands in Vanuatu has resulted in fragmented linkages between centre and periphery. Small-scale rural development efforts in the outer islands have been partly constrained by inadequate shipping services to the peripheral island economies. In the early 1990s problems of development in the outer islands and problems of transport are inter-dependent.

This section of the Chapter discusses the role of shipping in island development. It is argued that the potential for fostering rural prosperity within the island communities of Mota Lava and east Ambae rests on the reliability and frequency of sea transport services to these outer islands. Air transport is becoming an increasingly important mode of transport for moving goods and people between the remote islands of the archipelago. These services play a significant role in integrating isolated island communities, such as those of the northern part of Vanuatu, into the wider socio-economic life of Vanuatu. While road transport is important in land areas which are not fragmented, such as in Papua New Guinea, the island-specific situations of Vanuatu are different. Road transport is largely irrelevant in the context of rural development on small, isolated and geographically dispersed island communities.

6.2.1 Transport infrastructure and its effect on the island economy

Fowler (1986), cited in Mael (1991:8), has described the type of service commercial ships provide to the islands in Vanuatu. Trading ships act as both copra collectors and distributors of consumer goods, and there is a close correlation between volumes of copra purchased and the volume of merchandise sold on each voyage. Not surprising, this situation prevails because many small-scale business operators and local villagers use this opportunity to purchase their store goods cheaply. For example, during the early 1990s islanders on Mota Lava bought their merchandise from M.V. *Magila*. Even though the ship served the island on an irregular basis it bought copra from local buyers and distributed consumer goods to various island trade stores and co-operatives.

The 17 trade store operators and the two distributors of fuel and kerosene on Mota Lava purchased most of their goods from these ships. Local islanders also bought basic household consumer goods such as sugar, soap, rice and matches from M.V *Magila* because they were more expensive in the island trade stores. Links between the frequency of shipping services and the operation of small-scale business enterprises are discussed further section 6.3. It should be noted here that the irregularity in shipping services to outer islands, which Dunbar (1981) identified, has persisted through the 1980s. Respondents on Mota Lava in 1991 indicated that trading vessels visited the island on average less than once every six weeks. Lack of adequate wharves and jetties has compounded the "outer island" problem in the Banks/Torres Region.

Air transport can play an important role in integrating isolated island communities into the national economy. In 1991 there were four airstrips in the Banks/Torres Region: Sola airport on Vanua Lava, Valuwa on Mota Lava, Linua on Loh in the Torres and a recently established airport on Gaua constructed in

1991. While this mode of transport is expensive, islanders make use of it since it is regular. In the 1980s Air Melanesiae and Dovair conducted six flights a week to Valua, with four trips to Torres (Republic of Vanuatu, 1989:4). However, in 1991 there were only two domestic flights run by Vanair to the islands every week, and in some instances weather conditions and insufficient loadings could lead to the cancellation of these flights. While air services declined in terms of their frequency of operation per week in the early 1990s, it does not mean that the service has got any worse. What it means is that in 1991 larger planes were being used to carry up to 15 passengers each. The volume of goods and people that can be moved has improved to some extent.

The availability of these flights to Mota Lava and the Torres Group has had some positive impacts in terms of small-scale cash generating activities in 1991. Islanders in Loh, for example, have made use of weekly flights to send fresh coconut crabs to licensed enterprises in Santo or Port Vila. This is also true in the case of Mota Lava but the number of coconut crabs and lobsters sent by air is not extensive as compared to that of the Torres Group. The backload of these flights from Loh, in most cases, is usually confined to basketfuls of coconut crabs loaded into twin engined aircraft.

The cost of a single journey by air to Santo from Mota Lava in 1991 was 5,500 vatu. The freight rate was 80 vatu per kilo. On the other hand, the cost of single journey by ship to Santo was 3,000 vatu. These costs make both transport services expensive and, for most local residents, travel to Santo was still a luxury.

In the case of Ambae in 1991 there were 3 landing grounds on the island with flights conducted almost daily. One airstrip is located at Longana, the second one is at Walaha on the north-western tip of the island, and the third is at Redcliff on the south-west of Ambae. In 1991 a single journey from Port Vila to Longana was 8,000 vatu. It was 2,000 vatu from Luganville. By comparison, a single journey by ship from Lolowai in East Ambae to Santo was 1,500 vatu.

6.2.2 Copra production and the distributive system

As noted in Chapter Five, copra was the main cash generating activity on Mota Lava and ranked third as a cash crop in Longana. The development of copra, as a main cash earner for most rural households, depends on how well transport infrastructure is developed to deliver the product to the point of sale. In addition, the distributive system through which copra is channelled also affects the sort of price the producers receive for their commodity. Figure 6.1 illustrates the framework of copra marketing channels in Vanuatu.

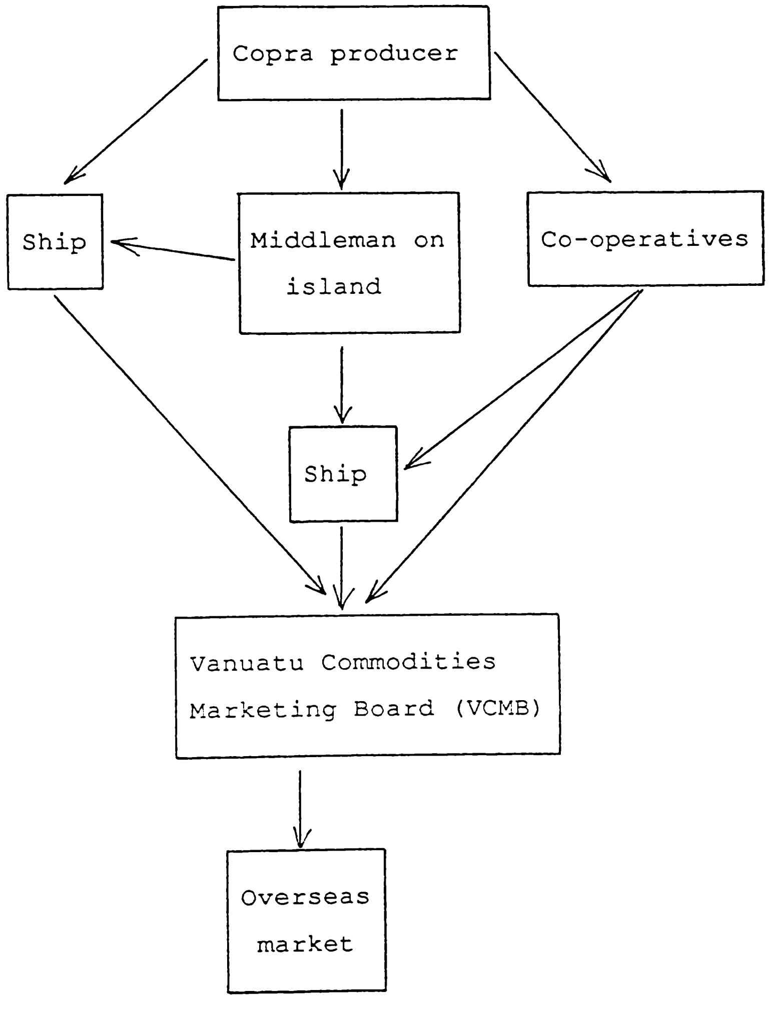


Figure 6.1 : Copra marketing channels

The structural features of the distributive system of copra resemble those of kava marketing channels which were referred to in Chapter 5. The presence of various purchasing agents such as co-operative societies, the middleman and the shipowners affect the price received by growers. The rural copra producer's ability to prosper from this activity is very much linked to these agencies.

Rodman (1981) noted that in Longana, marketing decisions the rural producers made as individuals had consequences for the returns they received from each sale. The decisions relating to when to sell, where to sell and how much to sell obviously reflect prices received from the sale of the commodity. Risks involved in selling or withholding copra, based on expectations concerning future shipping services, also affected their marketing decisions. Social circumstances, such as repeated dishonest copra trading on the part of co-operatives or shippers, will cause smallholders to seek other buyers and thus decisions are always changing. Table 6.12 indicates the extent to which households in the two areas used the three main agencies which bought copra from the small producers.

Table 6.12: Number of households selling copra to main copra buying agents in Nerenigman village and Longana area, 1991

	Nerenigman village		Longana area	
Agent	No. of HHs.	% of sellers	No. of HHs.	% of sellers
1. Ship	16	39.0	0	nil
2. Middlemen	9	22.0	25	75.8
3. Co-operatives	16	39.0	8[a]	24.2
Total:	41	100.0	33	100.0

Note: [a] This includes 3 households who sold their copra to the Commercial Centre at Lolowai and 5 households who sold to the Hilehile Co-operative Society at Wailengi.

Source: Household surveys, Nerenigman village and Longana area, 1991.

Mota Lava's selling outlets for producers in the early 1980s included trading ships as well as the two co-operative stores in which they held shares as members (Campbell, 1985). Rodman (1987:145) indicates that co-operative societies in Longana purchased most of the copra from those of their members who were small producers. All other small producers, however, sold their copra to the middlemen, although some small producers also sold copra direct to exporters when ships called. According to Rodman (1987:96-97) small producers were not making copra to make money but to buy basic consumer goods, while on the other hand large producers often invested as well as consumed income from copra.

In the early 1990s households had three alternative outlets for their copra: trading ships, co-operative societies and local middlemen (Figure 6.1). All three options were used in Nerenigman, while in Longana there had been no sales to a ship in the six months before the interviews were held.

In 1991 in Longana, there were four main buyers of copra: two middlemen (Joe Mala and David Bule), one co-operative society (Hilehile Co-operative Society at Wailengi), and the commercial centre located at Lolowai (Edison Mala, Secretary, Hilehile Co-operative Society, personal communication, October, 1991). At the time of interview 75 percent of the producers sold their copra to a local middlemen, while the other eight households sold their copra in the commercial centre at Lolowai and to the Hilehile Co-operative Society (Note in Table 6.12).

This pattern appears to be in line with Rodman's (1987:144) finding in the early 1980s that large producers and the middlemen in Longana dealt directly with the ships. Most small producers sold their copra to these outlets which arranged to transport the copra to a storage dock where a firm cash price was received. Joe Mala, a Longanan, is one example of a successful local entrepreneur who buys copra from the small producers. He lives at Wailengi and also conducts similar activities near the Ambae/Maewo Local Government headquarters at Saratamata.

In addition to copra buying, this local entrepreneur also operates two large trade stores and a taxi service. Thus it is logical to suggest from responses received in the 1991 household survey that producers sold their copra to the middlemen at these locations.

The observation that local Longanans were emerging as successful entrepreneurs captures the point made by Rodman (1987:115) in the early 1980s that "as they (large landholders and middlemen) accumulate more profits some expand their middleman activities, for example, opening trade stores or operating taxis". A small group of these local Longanans were already demonstrating their capabilities in the capitalist economy in early 1991. These business activities of a few wealthy people not only play an important role in developing the village cash economy, but also assist in providing money and goods at village social functions, such as marriages and funeral feasts.

6.3 Commercial infrastructure

Small-scale business enterprises, such as trade stores and co-operative societies, play significant roles in the commercial cash economies of both Mota Lava and Longana. Co-operative stores, in particular, incorporate rural households into commercial activities and many represent "a viable alternative to the encouragement of individual enterprise" (Bayliss-Smith, et al., 1988:209). Hailey (1986:4-6) argues that these indigenous enterprises should encourage the redistribution of wealth within a community and play a vital role in the balanced development of the islands.

6.3.1 Co-operative stores

In the early 1980s Campbell (1985:126-127) noted that on Mota Lava there were three small island stores and two co-operative society stores, one of which was located at Totoglag and the other at Nerenigman. The QRTV (Qweyemgnde, Ra, Totoglag and Var) Co-operative Store at Totoglag had its small branches established at Ra and Var and they operated with success. The share capital of the QRTV was held with the main store at Totoglag. Goods that were ordered by the QRTV were supplied and distributed to the branches from the Totoglag store.

During the mid-1980s there were problems with the operation of the QRTV, and as a result, many shareholders from Ra and Var villages withdrew to form their own separate co-operatives. In 1986 this led to the QRTV branch at Ra becoming a separate establishment. Two years later in 1988, Var branch also became a separate establishment from the main QRTV Co-operative Store. The number of shareholders with the QRTV had declined from 280 in 1972 to 174 in the early 1980s (Campbell, 1985:134). By 1986, according to the former secretary of the Society, it had declined further to only 88 members (Philip Bula, personal communication, Ra island, 1991).

The economic situation with regard to commercial enterprises on the island in 1991 had changed. The two former branches of a QRTV Co-operative Store located on Ra island and in Var continued to conduct their own orders and kept separate accounts. The survival of the QRTV was in question in the early 1990s because of low membership numbers and a dramatic decline in imports between 1984 and 1990 (Table 6.13).

It is clear from Table 6.13 that since 1986, the QRTV Co-operative Society on Mota Lava has experienced a significant decline in the volume of purchases and sales. However, this trend does not necessarily suggest that the island's economic base has worsened over the last decade. The island's main commercial activity is now conducted through other retail outlets. In the early 1990s there were 17 small trade stores; their role in the island economy is discussed in section 6.3.2.

Table 6.13: Trading by QRTV Co-operative Society, 1984-1990 (nominal values)[a]

Year	Total cost of goods imported (vatu)[a]	Total value of sales (vatu)	Profit generated (vatu)	Percentage profit
1984	6,268,330	7,797,792	1,529,462	24.4
1985	5,060,544	7,050,325	1,989,781	39.3
1986	4,607,258	6,508,659	1,901,401	41.3
1987	2,698,380	3,715,732	1,017,352	37.7
1988	3,250,260	4,523,740	1,273,480	39.2
1989	722,395	1,020, 660	298,265	41.3
1990	549,520	809,010	259,490	47.2

Note: [a] Total cost of goods imported for the six months period in 1991 from January to June was 243,550, while total sales reached 357,080 vatu. Campbell (1985:142) shows that the total imports to the island during 1979 was 8,605,893 vatu and in 1980 it had dropped to 7,256,796 vatu (This figure includes both QRTV and SCAF, although the latter accounted for only a small proportion of the total).

Source: QRTV Co-operative Store, Mota Lava, 1991

The other co-operative store at Nerenigman went into liquidation in 1990 and is no longer in operation. There is no data available to assess the contribution made to the island economy by this Society. However, in the early 1980s Campbell (1985:127) points out that the two societies (QRTV) and "the store at Nerenigman, under the *Société Coopératif Administration Français* (SCAF)" controlled 95 percent of the external trade on the island.

The Nerenigman Co-operative Store's building had been converted into a village market by 1991. The QRTV Co-operative Store located at Totoglag was almost empty of stock compared with the early years of its operation. Villagers commented that the QRTV store in the late 1970s and early 1980s resembled any "Chinese store in Port Vila or Santo" in terms of the range of goods it had sold. In early 1991, it appeared that the store was almost in a state of bankruptcy and it sold only a few items.

Co-operatives and the Lolowai Commercial Centre

Longana has number of commercial institutions, aside from local trade stores, which serve the local people. They include three banking agencies (a Westpac Branch, Vanuatu Savings, Vanuatu Development Bank) and a Commercial Centre at Lolowai. They serve as important institutions in the development of the local economy since some funds, such as shown in Table 6.14, have been made available from these sources for the local people to meet the cost of their small business enterprises.

A branch of the Vanuatu Development Bank has two fulltime staff members of which one is ni-Vanuatu and the other a volunteer funded by the Japanese government. Since the Bank's establishment in 1989, the number of loans made has been minimal. There are two types of loan which ni-Vanuatu can obtain from this Bank. One is a micro-loan which is available for a project that costs less than 100,000 vatu. The other is a major loan and this is made available for a project that costs more than 100,000 vatu. These loans can be for either agricultural or non-agricultural projects. An example of an agricultural project which could attract a loan is the purchase of wire for a cattle paddock. An example of a non-agricultural project would be purchase of a lawnmower or a chainsaw.

The requirement of a personal guarantor or sponsor and other bureaucratic procedures have inhibited some potential clients from lodging applications for personal loans. The procedures for approval of loans are also time-consuming. In 1991 a high interest rate of 16 percent per annum was levied on every sector/type of loan made and repayment was to be made every month. If repayment of the loan was not made within a specified time, then a penalty interest of one percent of the outstanding balance was levied (Ben Namu, personal communication, Lolowai, 1991). Due to these factors, most villagers still depended on family savings and small loans from local money lenders when seeking capital resources for development projects.

The total number of loans made over the period from 1989 to 1991 was 11. Most of the applicants have been local people and Table 6.14 shows the type of loans that have been made, the amount approved and the home areas of the applicants.

Table 6.14: Approved application loans by Vanuatu Development Bank, Lolowai, 1989

Purpose of loan	Number approved	Amount (in vatu)	Home area of applicant
Housing[a]	3	299,015	Maewo[c] and Longana[d]
Housing[b]	2	1,498,670	North Ambae[d]
School Fees	1	20,000	Longana
Chain Saw	1	100,000	North Ambae
Fishing Boat	1	520,000	North Ambae
Small Business	1	100,000	North Ambae
Agriculture	2	442,000	Longana
Total:	11	2,979,685	

Notes: [a] This loan was regarded as a minor loan within the non-agricultural sector. The actual amount received by each applicant was 99,671 vatu.
[b] This loan was registered as a major loan and was also non-agricultural. Total amount received by each applicant was 749,335 vatu.
[c] One applicant that came from this area.
[d] Two applicants came from these areas.

Source: Vanuatu Development Bank, Lolowai, 1991.

The Commercial Centre located at Lolowai was established in 1986 funded by the Japanese Government. It will be recalled that the national government planned to establish Regional Commercial Centres in the archipelago during the DP2 period. The main functions of these Commercial Centres are: to distribute wholesale store goods to the local store owners on the island; provide an incentive to local villagers to start small businesses; and finally to train shop keepers in basic book-keeping and enterprise management. Since the establishment of the Lolowai Commercial Centre in 1986, some positive results have been forthcoming. A total of 10 new trade stores have been established which continue to be supervised by the Centre. In addition, the sales of trade store goods by the Centre increased from 1.3 million vatu in 1989 to 3.0 million vatu in 1991 (Jeffrey Tagaro, personal communication, Lolowai, 1991).

A number of co-operative societies have capital share holdings in the Commercial Centre. At the end of each financial year, six percent of the total profit accumulated by the Centre through its operation is dispersed to the co-operative share members. Some of these co-operatives have been frozen in terms of their operation but their capital share is still held by the Centre, while others still continue to operate. A number of them have completely closed down due to management problems. A list of these co-operatives is given in Table 6.15.

Table 6.15: Co-operative societies which have a share holding in the Commercial Centre at Lolowai, 1991

	Name of co-operative	Location	Shares (in vatu)	(%)	Status
1.	Wai Co-op. Society	Lolowai	1,696,500	35.1	existing
2.	Talvora Co-op. Society	N. Ambae	638,106	13.2	existing
3.	Longana Sav. & Loans Soc.	E.Ambae	468,383	9.7	frozen
4.	Muleluna Co-op. Society	W. Ambae	331,500	6.9	existing
5.	Telili Co-op. Society	Maewo	315,606	6.5	existing
6.	Siwoi Co-op. Society	E.Ambae	314,500	6.5	closed
7.	Lolloeo Co-op. Society	Maewo	245,235	5.1	existing
8.	Weweu Co-op. Society	S.Ambae	217,220	4.5	closed
9.	Taligu Co-op. Society	S.Ambae	224,720	4.6	closed
10.	W. Ambae Sav. & Loans Soc	W. Ambae	127,118	2.6	frozen
11.	Hilehile Co-op. Society	E.Ambae	54,134	1.1	existing
12.	V.C.F (N.H.C.F.)	Port Vila	201,675	4.2	existing
Total			4,834,697	100.0	

Source: Commercial Centre, Lolowai, 1991.

Rodman (1987:129) makes reference to two co-operative societies in Longana that handled about one third of Longana's copra in the early 1980s. However, she does not specify which ones they were, although the list of co-operative societies involved in the Commercial Centre shows that there were three co-operative societies in existence in Longana area in the early 1980s and in 1991:

Wai Co-operative Society located at Lolowai, Siwoi Co-operative Society at Atavoa (now closed) and Hilehile Co-operative Society at Wailengi. These societies, among others, have a share holding in the Commercial Centre at Lolowai (Table 6.15).

Hilehile Co-operative Society was first established in April, 1965 and had an initial membership of 200. At that time a contribution of $A80 came from each member for a full share. However, in the early 1990s it was 4,000 vatu for a full share with 15 percent of the profits to be paid to the share holders per annum. Members of the Society came from whole of East Ambae and the inland areas of the island. By 1991 the Society's membership had declined to 120 members, largely because of a lack of bonus or profit payment on an annual basis to the shareholders (Edison Mala, Secretary, Hilehile Co-operative Society, personal communication, October, 1991).

As of mid-1991, the total value of capital shares at the Commercial Centre held by the 12 societies listed in Table 6.15 was 4,834,697 vatu with the largest share (35 percent) held by the Wai Co-operative Society. On the other hand, Siwoi Co-operative Society and Hilehile Co-operative Society hold only 6.5 percent and 1.1 percent of the shares respectively. The latter co-operative society has been largely affected by the withdrawal of its share members as noted earlier in the discussion.

Out of the 11 co-operatives listed in Table 6.15, 4 of them (36 percent) were actually located on East Ambae. Despite the fact that a number of these co-operatives have closed because of managerial problems, there are opportunities for future revival using their capital shares currently held at the Centre as interest bearing deposits. Their capital shares have been growing, which is in part due to the successful operation of the Centre.

A number of reasons were given by informants for the ineffective operation of co-operative stores. Firstly, in the case of Mota Lava, the operation of the QRTV

Co-operative Store depended on copra production by shareholders. When the shareholders withdrew their share capital from the store, it meant that any revenue generated from copra sales towards supporting the operation of the co-operative store was lost. A second problem, which was common in both the Mota Lava and Longana areas, was continued provision of *kaon* (credits) to the share-members in the form of cash and basic consumer goods held in the store. Many shareholders in the QRTV Co-operative still had outstanding accounts for credit which had not been repaid to the store. The third problem was the lack of trained staff with basic book-keeping or accounting skills.

These problems, together with the continued turnover of staff for the position of secretary of the store, reduced the management capability of the operations. Infrequent visits by the co-operative inspectors and personal conflicts inherent in the operation of the society, also contributed to failure of some co-operative stores (Jeffrey Tagaro, personal communication, Lolowai, 1991). Hailey's (1986:9) list of causes for business failure in the Pacific is relevant in the case of co-operatives in Mota Lava and Ambae:

> a lack of management experience and business skills; undercapitalization, caused by an inability to raise the necessary funds; restrictive government policies; inadequate infrastructure; lack of appropriate training and advice, and lack of information on markets, incentives, [and] subsidies.

By 1991 small privately owned retail stores had largely replaced co-operative societies on Mota Lava and in the Longana area. This has been common in other Pacific countries, especially in the post-colonial period. The co-operative movement was encouraged by colonial administrations. There has been less commitment to promoting this type of commercial enterprise in the independent states. Private enterprise is favoured increasingly as a route to prosperity.

6.3.2 Island trade stores

Campbell (1985:127) notes that there were three individually owned trade stores on Mota Lava in the early 1980s. He suggests that 5 percent of the island's commercial activity was associated with these trade stores. The rest of the island's external commerce (95 percent) was conducted by the two main co-operative stores located on the island. This excludes the goods which reached the island with migrants returning from Port Vila and Luganville, or which were purchased direct by villagers from trading vessels.

By early 1991 there were 17 small trade stores on Mota Lava. This excludes small family operations which sold black tobacco. These stores are privately owned and obtain wholesale goods from Chinese-owned distributors in Santo or, alternatively, make direct purchases from trading ships when they visit the island. A variety of basic consumer goods are sold in these stores including sugar, rice, tobacco, soap, kerosene, matches, batteries, bush knives and various brands and sizes of tinned meat. The prices of these goods are not consistent between stores and they are usually very high compared with prices on the ships.

Since the supply of goods to these stores is dependent on local shipping services they can go without stock for long stretches of time. Where owners opt to have their goods flown in by air, freight rates can push prices up significantly. Table 6.16 below shows the rate of change in price of some basic consumer goods. A comparison of rates of change in consumer prices over a two year period is made using Campbell's (1985:146) data.

The rate of consumer price change provided by Campbell (1985:146) for the period 1979 to 1981 showed selected basic consumer goods, such as rice, canned meat and laundry soap, sold in the stores increased by more than 80 percent (Table 6.16). On the other hand consumer prices rose by around 20 percent between 1989 and 1991.

Table 6.16: Comparison of consumer prices in 1989 and 1991[a]

Commodity	Prices in vatu 1989	1991	% change (1979-81)	% change (1989-91)
Rice (1kg)	130	170	87.5	30.8
Canned fish (0.425 kg)	160	170	66.7	6.3
Cooking oil (1 litre)	280	300	66.7	7.1
Stick tobacco (1 piece)	140	160	66.7	14.3
Tinned meat (.200kg)	130	160	-	23.1
Sugar	140	170	-	21.4

Note: For the purposes of comparison, consumer price change for 1979-1981 were derived from Campbell (1985:146). The 1989 retail prices were derived from receipts of sale of these goods at the QRTV Co-operative Store, while the 1991 consumer prices were obtained from trade store survey on Mota Lava.

Source: Trade store survey, Mota Lava, 1991.

While geographic isolation and the transport factor are reasons for ensuring costs of goods will be high in the outer islands, an explanation for variation in consumer prices on the island in the early 1980s and in 1991 is associated with the transition from colonial administration to political independence.

This point is well captured by Crowley (1992:2) who has argued that immediately after independence, Vanuatu experienced a period of rapid inflation which, in part, was caused by the French government's control of the exchange rate between the French franc and the New Hebrides franc. The latter remained in circulation for some time after independence, until Vanuatu vatu were introduced in early 1982. This inflation, therefore, affected the prices of all imported goods in post-colonial Vanuatu, and it is not surprising to see the high percentage increases in prices noted by Campbell (1985:146) during this period.

Campbell (1985:145) shows that consumer prices increased steadily from the middle of 1970s but then rose dramatically in the early 1980s, especially in the outer islands such as Mota Lava. It is also noted in DP2 (Republic of Vanuatu, 1989:47) that the inflation rate in 1982 was 9.1 percent. This had dropped from a high of 22 percent from the previous years which resulted from disruption to the economy caused by civil disturbances around the time of independence.

Figure 6.2 shows the consumer price index for low income groups in Santo between 1981 and 1990. It is apparent that since the early 1980s consumer prices have been increasing constantly, although the annual rate of change in the price of goods during the 10 year period has been lower than it was on the eve of political independence.

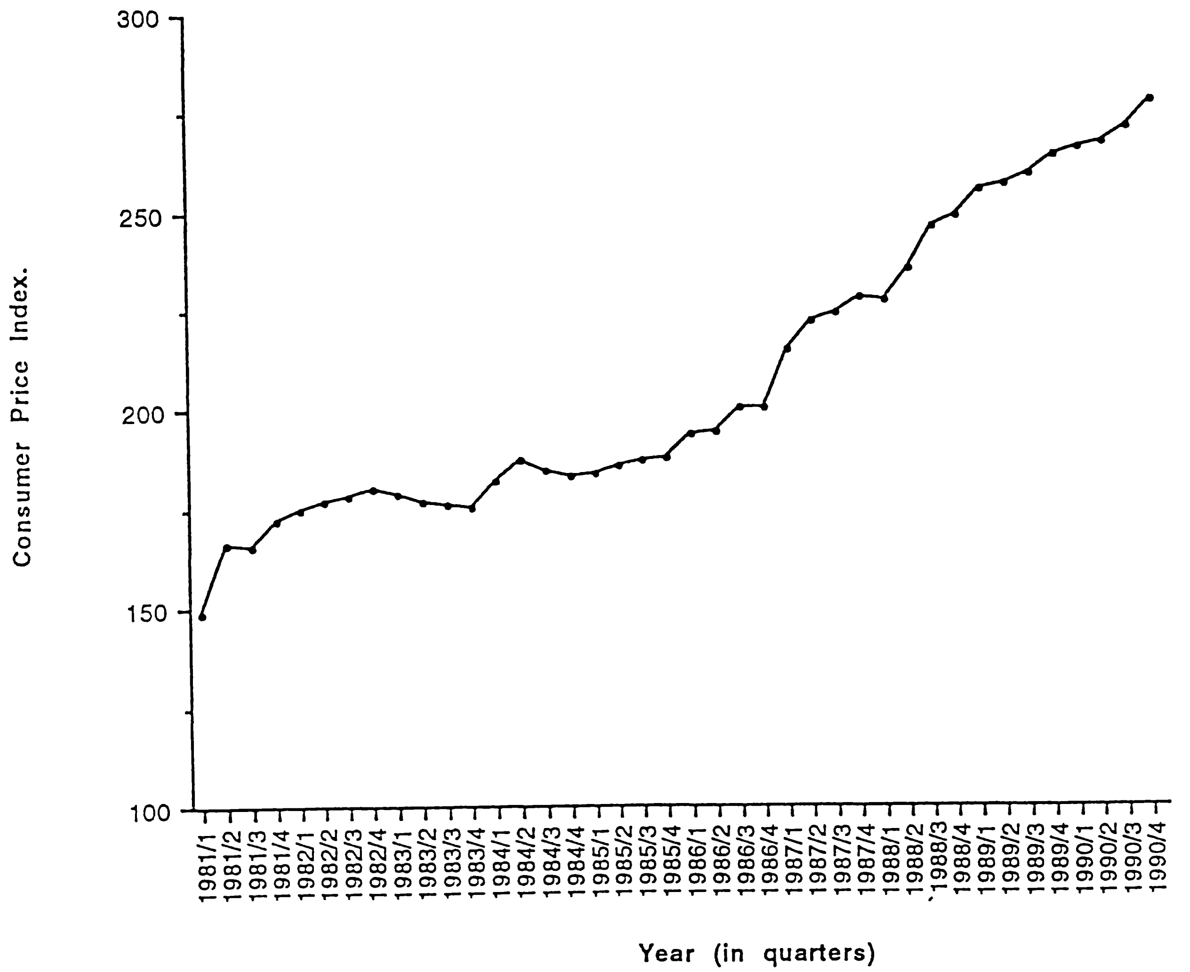


Figure 6.2 : Consumer price index, low income group, Santo, 1981-1990

Trade store survey

In 1991 a sample of eight of the 17 stores on Mota Lava and Ra island were included in a survey designed to examine, among other things, the distributive system of these enterprises, initial capital injection and how this capital was raised. Table 6.17 gives some summary information on the stores which were included in the survey.

Table 6.17: Trade stores on Mota Lava and Ra island, 1991

Name of store	Date established	Initial capital investment (vatu)	Value of goods in stock 1991 (vatu)
1. Charles Gorden Company (CGC)	1987	100,000	41,890
2. Philip Store	1990	30,000	56,310
3. QRTV Co-op. Ra Branch	1972	funded by QRTV [a]	60,152
3. MRTTA	1982	4,000	12,190
4. Alfred Weqas Store	1973	40,000	42,900
5. Wokeke	1987	60,000	122,100
6. Liley	1987	sold copra	3,000
8. Litsam	1990	30,000	mainly selling petrol and kerosene
Total			338,542

Note: [a] Initial capital investment for this branch was by the QRTV Co-operative Society main store located at Totoglag.

Source: Trade store survey, Mota Lava, 1991

One of the most prosperous small trade stores on Mota Lava is Wokeke. This was evident from the variety of goods that were sold by the store. In 1991 the value of goods held in stock was 122,100 vatu. The success of this store is associated with the fact that the owner's elder brother had a job as a Accountant at Vureas High School in Longana in 1991. Apart from profit, which is made from the sale of basic consumer goods to purchase additional stock, extra money and store goods are continually remitted by the elder brother to support the operation of the store on the island. Philip Store on Ra island also showed potential for future expansion and is owned by a former secretary of the QRTV Co-operative Society. As the respondent noted, this work experience with the Society had equipped the operator with basic book-keeping skills (Philip Bula, trade store survey, Ra island, 1991).

Funding for the initial establishment of these stores came from a variety of sources including: revenue raised from the sale of copra, partnership contribution from relatives, sale of bread, and terminal salaries received from previous employment in either private or government organisations. In a number of cases it involved all of the above. For example, two stores were established using funds contributed by relatives and this was supplemented by terminal salaries of the owners. This is similar to Newton's (1985:186) findings where proceeds of wage labour and contributions from relatives in a clan were used to set up and support a store in Koropatan, a village in Oro Province in Papua New Guinea.

None of the store owners included in the survey had received any financial assistance from credit facilities such as the bank which is already available on the island. The difficulty in obtaining a loan for this purpose from the bank is due to reasons cited earlier for the Longana area.

Rodman (1987) does not make any reference to trade stores in Longana in the early 1980s, although she makes a mention of two co-operative stores which bought copra from producers and sold basic consumer and non-consumer goods to the rural villagers. This means that there is no specific baseline information that can be used to assess the role of small trade stores in the village economies of Longana in the early 1980s. However, the presence of large numbers of these stores outside of the case study area in the early 1980s no doubt brought some economic benefit to the villagers.

In 1991 there were five retail stores located in the case study area in Longana. One was located at Lovatumalava, a hamlet with one household located further inland. The remaining four were located within the Navonda area which included the airport as well. One was located at Lolosara and the other two, owned by the women's club are located near the airport. The main items on sale are similar to those sold by similar sized trade stores on Mota Lava. In Longana some beverages, such as wine and beer, were also sold at an inflated price. Goods sold in retail stores in Longana are bought in bulk from the Commercial Centre at Lolowai, although some operators also opt to buy their stock from the Chinese shops in Santo.

A number of store owners have attended 2-3 month training courses in basic accounting on Santo. These courses are conducted by the Office of Business and Rural Development. Another factor which is assisting these operations to remain viable is their family ownership. This means that any revenue collected from the sale of various store goods is used by the family. This is unlike the business enterprises owned co-operatively where repeated dishonesty at a managerial level is a recurring phenomena. The other economic advantage of individually or family-owned trade stores is that they give owners access to Western-type food on a regular basis. Thus they serve as a valuable supply of basic necessities of food to supplement garden produce consumed by a household.

6.4 Institutional arrangement for supporting rural change: the case of Local Government Councils and international aid

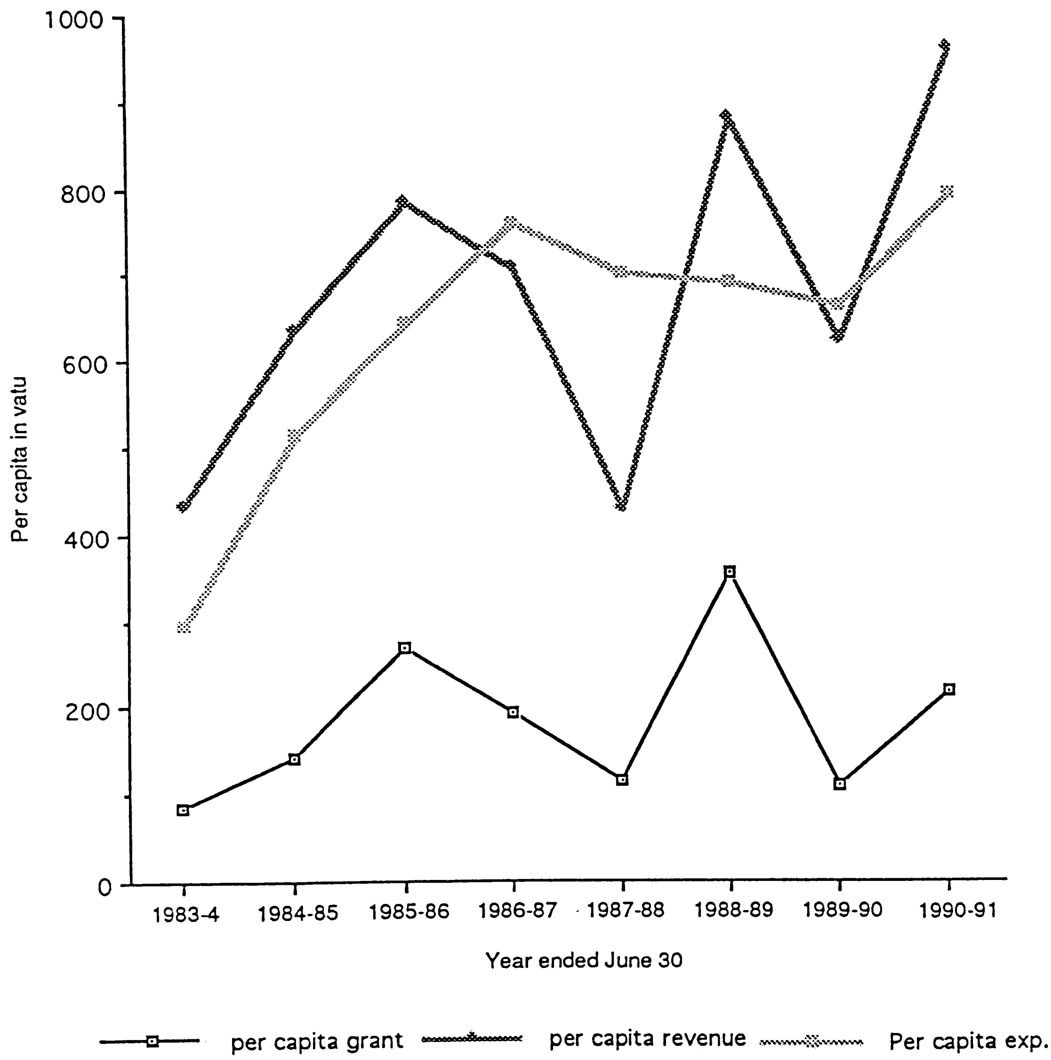
The notion articulated by regional planners that an even pattern of rural and regional development in different regions of the archipelago can be achieved through the local government system is one of the crucial questions which is addressed in this section (Republic of Vanuatu, 1989:174). It begins by defining the role local government plays in fostering rural development efforts in post-colonial Vanuatu. External grants, which are also a significant source of government revenue for funding public sector expenditure at national and regional levels are also examined. This assessment is made in the context of capital and technical assistance programmes and projects. Financial grants from the core to the regional councils for various development purposes are then discussed in the context of practice at the level of the Local Government Region in the early 1980s and in 1991.

Ward (1990:2) argues that subnational planning in archipelagic countries, such as Vanuatu, makes "multilevel development and planning ... essential" to account for fragmented populations and an "incomplete urban hierarchy" (Ward, 1990:2). The introduction of regional governments to promote subnational development in post-colonial Vanuatu makes administrative decentralisation relevant and examination of the practice of subnational development planning in the 1980s and 1990s appropriate. The experience of post-colonial subnational planning for rural change is examined in the context of revenue generation capabilities. Eleven Local Government Regions are compared and examined with regard to various sources of revenue which LGRs can use for development purposes.

6.4.1 National government grants and Local Government revenues, 1980-1991

The eleven Local Government Councils raise revenues which can be used to support projects in the rural villages from various sources. Ghai (1985:55) notes that internal revenue to support development in the rural areas of Vanuatu is derived from local taxes and fees such as a head tax, liquor licences, business licences, and grants from the national government. These sources of local revenue are important for matching national government grants. Business licences are particularly important as an indicator of the economic base of the Local Government Regions.

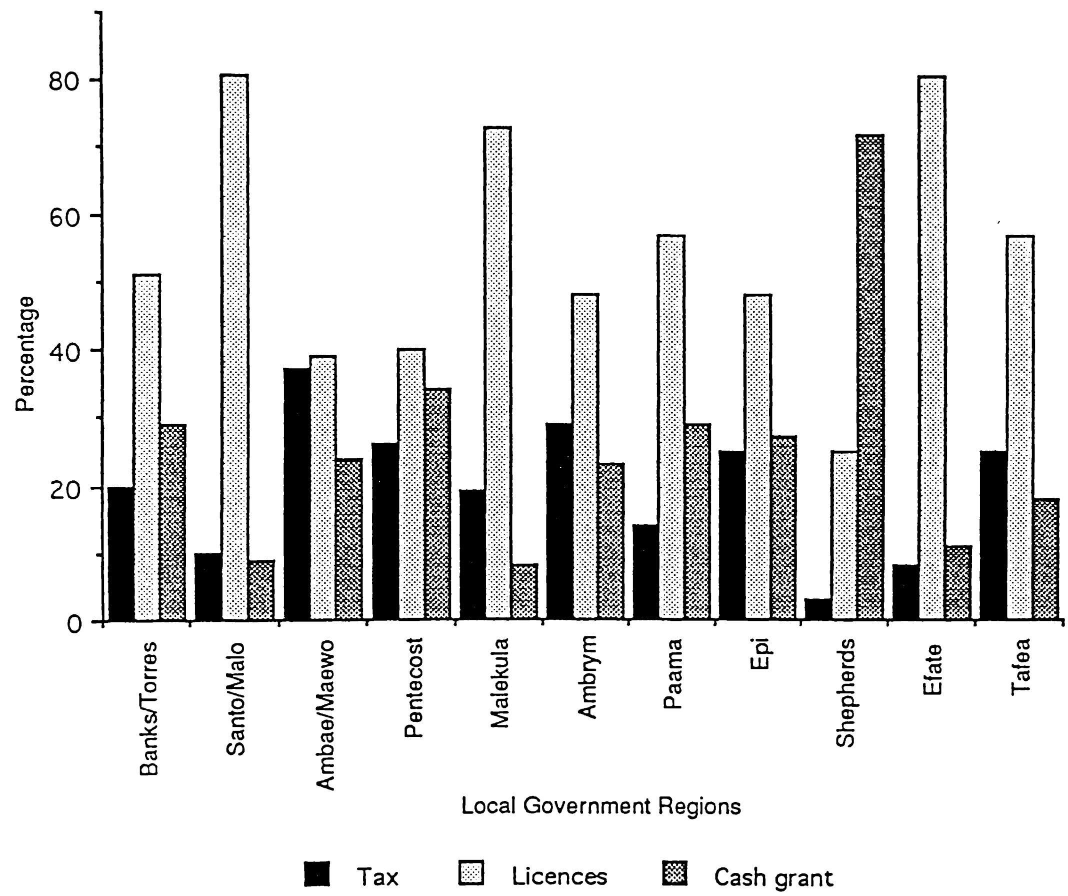
Figure 6.3 clearly illustrates that since the establishment of LGRs in the early 1980s, the national government's financial grants to each region has closely matched the pattern of per capita internal revenue generated by the LGRs.



Source: Department of Local Government, Port Vila, 1991.

Figure 6.3 : National averages of per capita grant, revenue and expenditure for LGRs in Vanuatu,1983/84 to 1990/91 financial years

From the early 1980s to 1991 revenue generation capabilities of some Local Government Regions have been below expectation, although there are some variations across all Local Government Regions. To illustrate the point, Figure 6.4 shows the proportion of revenue generated from taxes, licences and cash grants from the national government for the 1987/1988 financial year. These data are only available at the level of Local Government Regions, not for specific islands or communities. Over all regions, 16 percent of revenue collected during the mid 1980s came from various forms of taxes, 65 percent from licences and 19 percent from cash grants from the national government.



Source: Department of Local Government, Port Vila, 1991

Figure 6.4 : Recurrent revenue make-up for LGRs from taxes, licences and government cash grant, 1987/1988.

Figure 6.4 shows that revenue generated from licences is more marked in the Local Government Regions where the main urban centres are located. During the 1987/1988 financial year, Santo/Malo and Efate LGRs both raised 81 percent of revenue from licences. In the case of Santo/Malo a smaller proportion came from taxes (10 percent) and government cash grants (9 percent). For Efate, eight percent of Local Government revenue was raised from taxes and 11 percent was derived from government cash grants.

By comparison, during the same financial year Ambae/Maewo Local Government Council generated 37 percent of its revenue from taxes, 39 percent from licences and 24 percent was made up of a government contribution. National government cash grants to the Banks/Torres Local Government Region contributed 29 percent, 20 percent came from taxes and a high of 51 percent from licences. These licences are mainly collected from small trade stores, such as those described earlier for Mota Lava. The other feature revealed in Figure 6.4 is that the national government cash grants to the densely populated Shepherds Region was 72 percent, the highest among all the LGRs in Vanuatu.

The various forms of taxes, licences and government cash grants are clearly not sufficient for maintaining existing services and development projects. This difficulty is well illustrated by the condition of schools and restoration of water supply systems on Mota Lava and in the Longana area in 1991. Another problem is that due to financial difficulties, Local Government Councils cannot operate effectively. The administration is short of cash to perform the very tasks which residents are expecting. This reinforces the view that head taxes only subsidize an administration without programmes and progress.

To illustrate more clearly some of the differences between LGRs in their sources of revenue, four regions are compared in Figure 6.5. My case study villages are located in two of the LGRs, while Paama represents an example of a small island with a total population of 1,695 people and Shepherds a region with several islands with a population of 3,965 people (Republic of Vanuatu, 1991:67). It is

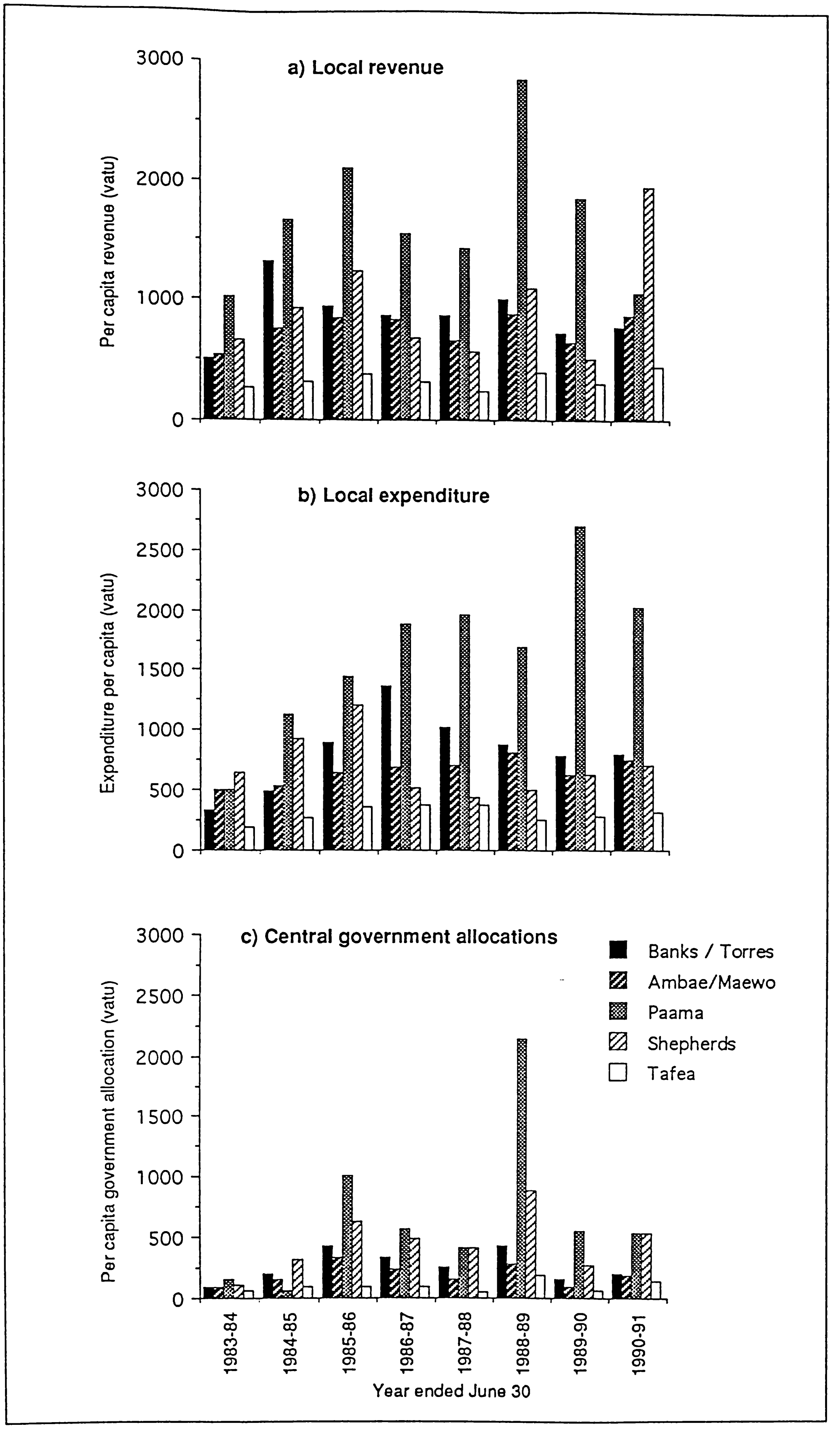


Figure 6.6 : Per capita revenue and expenditure, 1983/84 to 1990/91 financial years, for selected LGRs

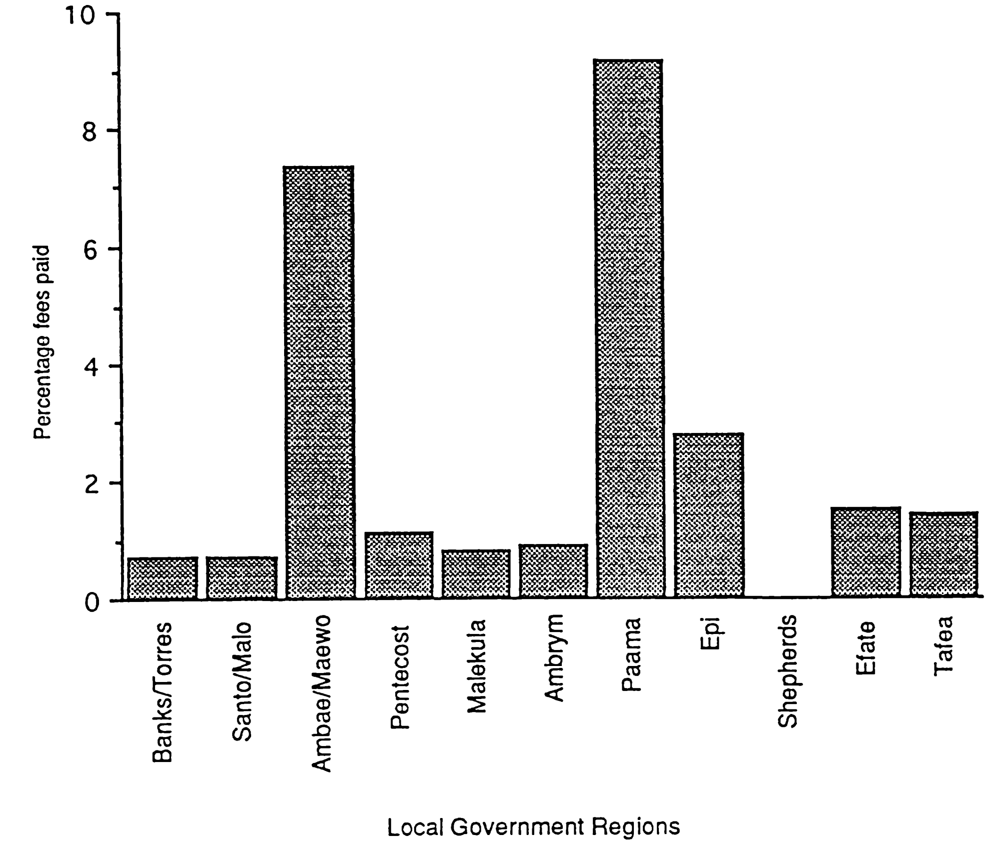
expected that those LGRs which have small populations, such as Paama, will invariably score high per capita revenues and capital expenditure. Figure 6.5 shows the per-capita revenue, expenditure and government allocations for the four LGRs.

There are three significant observations which are made from from the graphs. Firstly, the Banks/Torres region generally did better than Ambae/Maewo in terms of per capita revenue generation. However, in nearly all years Paama exceeded Banks/Torres. Secondly, the mid-1980s saw much higher levels of expenditure in Banks/Torres than late 1980s and early 1990s. Thirdly, government allocations per capita to Banks/Torres and Ambae/Maewo have tended to be lower than those to the two more "central" small island councils (Paama and Shepherds), perhaps reflecting the peripheral nature of the northern islands.

Figure 6.5 shows that revenue per capita, expenditure per capita and government allocation per capita for Paama are well above the rest of the other LGRs included in this assessment. Certainly it was high among all the eleven LGRs in Vanuatu for the financial years 1983/84 to 1990/91. When these four Regions are compared, Paama and Shepherds score well in most cases, while in the case of the Banks/Torres and Ambae/Maewo Local Government Regions they are generally much lower. This implies that Local Government revenue generated from various sources and capital expenditure per capita on Mota Lava and in the Longana area has probably not improved much over the decade. For example, capital expenditure per person was small which invariably affects the potential for improving or maintaining social services and infrastructure on the islands.

Haberkorn (1989) suggests that in the mid 1980s a shortfall in revenue from taxes in some LGRs was due to non-collection of various fees and rates. The other suggestion is an overestimation of budgets. For example, estimated revenue to be generated through business licences could have been too high, with not many businesses operating in that particular financial year.

Local Government Regions also collect fees from other services provided by them. Water charges is one example. Figure 6.6 shows the rates collected as a percentage of maintenance funds required.



Source: Department of Local Government, Port Vila, 1991.

Figure 6.6 : Water charges for LGRs, 1987/1988.

In the mid 1980s Paama and Ambae/Maewo Local Government Regions collected about nine percent and seven percent respectively, of the funds required for maintenance of water supply systems, while the rest of the Regions, with the exception of Epi, were well below the average amount of two percent of revenue required for maintenance. In the Banks/Torres Region only 0.7 percent of the required revenue was raised from water charges. This low percentage collected by most LGRs is nowhere near the amount required to make a noticeable contribution to maintenance requirements to keep these systems operating. In the case of Santo/Malo, water charges collected amount to less then 1 vatu per person per year. Even in the most favourable case of Paama, the 37 vatu per person per year which is collected contributes less than 10 percent of the total maintenance cost required to keep the water systems operating.

In order to ensure on-going improvement in infrastructure and investment in new agricultural projects, foreign aid has become an essential ingredient of the financial support for rural development. The final section of the Chapter identifies the major sources of overseas development assistance in post-colonial Vanuatu, and examines the distribution of this assistance across various types of project in the Ambae/Maewo Local Government Region.

6.4.2 Sources of revenue to Local Government Regions from foreign aid

Vanuatu's overseas development assistance (ODA) in 1987 originated from more than 20 sources. Major donors included Australia, France, the United Kingdom, Japan, New Zealand and the European Community (AIDAB, 1990:4). Each of these donors have specific areas of interest where aid for development is injected. Some of the more specific areas of interest for which development aid is made available are shown in Table 6.18.

Table 6.18: International assistance programme for Vanuatu, 1990

Country	Programme description
1. France	Technical assistance, training and project assistance
2. United Kingdom	Technical assistance across most sectors and project aid in the agriculture, forestry, economic infrastructure and health sectors
3. Japan	Mainly equipment and technical assistance focused on developing economic infrastructure, agriculture and fisheries
4. New Zealand	Provides assistance in the health, education and forestry sectors with forestry the most important
5. Australia	Education, agriculture, infrastructure (including cyclone reconstruction), and community assistance (mainly in support of the Rural Water Supply project, agriculture, communication equipment and tourism related infrastructure

Source: AIDAB (1990:4-5)

While there has been a decline in bi-lateral aid from donor countries from a high of 90 percent in 1983 to 63 percent in 1987, it is clear that other aid agencies, especially multilateral agencies and the European Economic Community (EEC), are beginning to play a dominant role in Vanuatu's post-colonial development (Table 6.19). These aid sources have been particularly useful for developing various projects and programmes in different LGRs of Vanuatu.

Table 6.19: Vanuatu: net ODA flows, 1983 and 1987

ODA source	Amount in US dollars (millions) and year			
	1983	%	1987	%
1. Bilateral[a]	24.4	90.7	32.5	63.7
2. Multilateral[b]	1.5	5.6	4.1	8.0
3. EEC	1.0	3.7	14.4	28.2
Total net ODA:	26.9	100.0	51.0	100.0

Note: [a] The main bilateral aid countries include Australia, France, United Kingdom, Japan, New Zealand and Canada. They mainly provide cash grants.
[b] Multilateral agencies include ASDB, IDA, UNTA, UNDP and WFP. Their assistance is largely aid-in-kind and technical assistance.

Source: Data adapted from Table 12 in AIDAB (1990).

Through the 1980s and early 1990s four sources of finance for development projects and activities were available at a subnational level. Haberkorn (1989:1) lists these as follows:

> 1. development finance derived from either domestic resources or from international development aid sources, which in both cases are channelled through central government departments' development projects and programs;
>
> 2. development finance obtained by various LGCs directly from overseas aid sources, through various Head of Missions' discretionary funds;
>
> 3. development finance available to LGCs through central government cash grants; and
>
> 4. revenues generated locally, that are mainly derived from various forms of local taxes (head tax, road tax, dog tax) rates, and the issue of business and other licences.

Haberkorn (1989) indicates that finance for new development programmes and projects on a subnational scale in the 1980s and early 1990s came almost exclusively from source (1) and to a very small extent from (2). Revenue derived from sources (3) and (4) was mainly geared to sustain externally financed development programmes or projects, although, as noted in the previous section contributions from these sources since the early 1980s have been variable across the eleven LGRs.

While I do not have any specific data to assess the importance of foreign aid in funding small-scale rural development projects at a community level, in the early 1980s and in 1991, information presented below for Ambae/Maewo LGR does give some indication of the types of projects these donor countries were sponsoring (Table 6.20).

Table 6.20: Ambae/Maewo LGR: list of projects funded by different aid donors, 1986-1991

Project type	Number	Aid donor	Year established
1. Wharves	3	ADB	1986
2. Tele-radios	6	France	1987
3. Boats (small)	3	Australia	1986
4. Air Terminals	4	Vanuatu Gov't.	1986, '87 & '90
5. Commercial Centre	1	Japan	1986
6. Saratamata Co-op.	2	N.Z & British	1990
7. Rain water tanks	d.n.a[b]	Aust. & SPC	different times
8. Water Sup. Proj.	17	Aust. & SPC	1986-'88
9. Sports Stadium	1	Vanuatu Gov't.	1988
10. Sewing Machines	2	Australia	1989
11. Community Halls	4	Australia	date unknown
12. Block Machines	d.n.a	Australia	1991
13. Lawn Movers	2	Australia	1988-'81
14. Piggery Project	3	Aust./Brit./N.Z.	d.n.a
15. Cocoa Drier	1	British	1991
16. Womens Club Build.	1	British	1990
17. Nakamal	1	Australia	1990
18. Cattle Projects	2	N.Z. & Aust.	1991
Total	53[a]		

Notes: [a] excludes the actual number of rain water tanks and the block machines distributed to various villages within the Ambae/Maewo LGC Region.
[b] d.n.a means "data not available"

Source: Ambae/Maewo Local Government Council headquarters, Saratamata, 1991.

Almost all of the 53 projects projects listed above have actually been funded since the mid 1980s. Regional organisations, such as the South Pacific Commission (SPC) contributed towards meeting the cost of providing materials for the water supply systems in rural villages on Ambae. The Asian Development Bank (ADB) has been involved in funding development of transport infrastructure including the three wharves in the Region. Two of these are on Ambae, one at Lolopuepue and the other at Nduindui, while the third one is located at Narovorovo on Maewo island.

The main donor country is Australia and only very recently, in the 1990s, has New Zealand begun to play a significant role in providing development assistance to the archipelago. The main emphasis is on agricultural projects such as the piggery and the cattle projects identified in Table 6.20. The piggery project is in Vuigalato village and the cattle project at Loval village on Ambae.

While Table 6.20 identifies the different projects by type, the sources of funding and year of establishment, it is also useful to show a classification of the various categories of projects. This information is provided in Table 6.21. Under transport infrastructure and communication are the construction and up-grading of wharves at Naravorovo on Maewo and at Lolopuepue and Nduindui on Ambae. It also includes purchases of small boats for the LGC, tele-radios for use by the LGC headquarters at Saratamata, and for Talise and Naviso on Maewo. The other three tele-radios were for Qwatamele, Sakau and Vugailato all on Ambae. The funds made available for the up-grading of air-terminals for Walaha, Longana and Redcliff on Ambae and also for Maewo island came from the French Government.

Table 6.21: Major categories of projects.

Major categories of projects	Number	%
1. Transport infrastructure and communication	16	30.2
2. Water supply projects	17	32.2
3. Recreation centres	1	1.9
4. Livestock projects	5	9.4
5. Commercial institutions	3	5.7
6. Machinery and equipment	4	7.5
7. Community centres and clubs	6	11.3
8. Agriculture projects	1	1.9
Total:	53	100.0

Source: Ambae/Maewo Local Government Council Headquarters, Saratamata, 1991.

Funding for the supply of cement for the construction of water wells and the provision of corrugated iron roofs for rain catchment in various locations on both islands came from the Australian Government and the South Pacific Commission (Table 6.20). As noted above, the New Zealand Government was the main source of funds for the development of piggery and cattle projects. It includes Vatauhiuhi and Vuigalato piggery on Ambae, Gaiovo on Maewo and Navuti/Natalu cattle project on Ambae as well. Funds for the establishment of a co-operative store at Saratamata and a Commercial Centre at Lolowai were made available by the New Zealand Government and Japan respectively.

Finally, in the context of machinery and equipment two sewing machines were given to Lolomatui community on Maewo, lawn movers for Atavoa and Navonda villages on East Ambae and block machines for mixing and making cement to a number of villages on both islands. Donations for these items were made available through the various Head of Missions' discretionary funds, particularly by the Australian and the British High Commissions. Others also include funding received for the construction of *nakamal* at Nanivele village and the Ambanga's women's club building, while sources of funds for a cocoa drier at Natuleo village on Ambae came from the British Government.

Of the 53 mini-projects listed in Table 6.20, only 11 percent were directly related to agriculture; 89 percent of projects were non-agricultural. This means that the main area of development through these aid funds was socio-economic infrastructure which did not generate any revenue directly, but which serviced the rural population. The provision of rural water supply accounted for 32.2 percent of the mini-projects listed in Table 6.21, while transport and communication related projects totalled 30.2 percent. Of the remaining projects, about 37.7 percent were social in nature, especially club houses and community halls which provide a focal point for community life. They also provide a place where women can get together and share common interests.

6.5 Conclusion

In 1991 infrastructure in the Longana area was better developed than on Mota Lava. Villagers in Longana had good access to a commercial centre at Lolowai and the Ambae/Maewo Local Government headquarters at Saratamata. Due to the presence of various commercial enterprises such as banks, trade stores and co-operatives at Lolowai, the integration of rural villages into the national economic system was well developed. These commercial enterprises had much wider catchment areas than the small stores on Mota Lava and through 'spread' effects were opening up new opportunities for the local villagers to start small-scale business enterprises. This was already evident in Longana area in the early 1980s, and by 1991 a number of local entrepreneurs were beginning to prosper from these opportunities.

Assessment of infrastructure in terms of capital resources of households, as well as health and school facilities showed that both areas have experienced different rates of socio-economic change. It is apparent from data presented on community resources that since the early 1980s both areas have made some progress in developing an infrastructural base at a village level to support small-scale business enterprises. On the other hand, there has also been some deterioration in certain services. A francophone community school on Mota Lava has experienced a sharp decline in student enrolments. This problem had been further compounded by a lack of available funds to carry out repair work on the school buildings in early 1991.

Examination of the transport factor in the island economy revealed that shipping services to Mota Lava have not improved since the early 1980s. This has affected local people's opportunities to participate in cash-generating economic activities, apart from producing copra. Managerial difficulties and unresolved credit problems, coupled with infrequent shipping services, have affected the survival prospects of some stores on the island. They can operate with limited stock for long periods of time but this affects their turnover with a possibility that the operation will eventually close down.

Since shipping operations are infrequent and unreliable, air transport has proved useful to the islanders. The isolated islands of the Banks/Torres group are now better linked by a regular air service than is the case with shipping services. The villages in the Longana area are also well linked by air transport. Air links mean mean that people's accessibility to the main urban cores is improved.

The role of Local Government Councils in fostering rural development efforts through their own revenue sources was shown to be relatively limited. The revenue generation capabilities of the eleven Local Government Regions in Vanuatu varies quite markedly. In the small island regions the local revenue base is inadequate to support either infrastructure development and maintenance, or new projects. Foreign aid has become an essential ingredient of rural development in Vanuatu. The extent to which this development assistance has contributed towards the creation of a better quality of life and the promotion of prosperity in rural communities is assessed more critically in the final Chapter.

CHAPTER SEVEN

TOWARDS PROSPERITY?

In an epilogue to a major survey of agriculture in the Pacific, written on the eve of Vanuatu's independence in 1980, Epeli Hau'ofa (1980:485) stressed that "the aspirations for material goods and services among the Pacific peoples are already so high, and rising, that rural development, as presently conceived and executed, is not able to meet them". Hau'ofa went on to observe that Pacific Islanders seemed to have made the choice for capitalist-style development, even if much of the rhetoric of planners and politicians in the region emphasised the need for alternatives based on preservation of indigenous practices and traditions. In his Preface to Vanuatu's Second National Development Plan, Father Walter Hayde Lini claimed that Vanuatu would establish "a unique path to development and greater prosperity" by recognising that "ni-Vanuatu society is comprised of Melanesian Pacific peoples and that this society can best develop in its own way at its own pace" (Republic of Vanuatu, 1989:i).

This thesis has examined the experiences of rural development in two islands in Vanuatu in the context of the expressed objectives of planners during the first decade of independence. The focus has been on cash-generating activities of households and "development" infrastructure on Mota Lava and in the Longana area on Ambae, a focus that reflects the importance of capitalist development in the rural sector. Baseline information from Campbell's (1985) and Rodman's (1981) studies of these areas in the late 1970s and early 1980s, together with data collected in a series of village surveys in 1991, made it possible to assess aspects of rural transformation since independence.

Three questions are considered in this concluding Chapter. The first is the question posed in the title of the thesis: has there been a move towards prosperity or have the changes led more towards the "rural depression and poverty" which Hau'ofa (1980:487) predicted if small-scale, partly subsistence/partly commercial operations, were to remain the basis of development in the rural Pacific? The second concerns the issue of "balanced" regional development which has been emphasised in the post-colonial development plans. Have the development of a decentralised system of regional administration, and the associated revenue generating and investment strategies, reduced spatial inequalities in development? The third question returns to a perspective which has been discussed in different places in this thesis with reference to rural development in Vanuatu. How do Melanesian writers view rural development in the context of their own people's aspirations for both higher material living standards as well as retention of indigenous spiritual values and traditions?

7.1 Towards prosperity?

As noted in Chapter One, "prosperity", for most Melanesian villagers is now associated to a large extent with access to cash incomes and modern consumer-goods in rural areas, as well as with the presence of assets, amenities and utilities which can be used by villagers to enhance their living standards. These tangible elements of "development" are not the only important attributes of "prosperity"; social harmony, mutual co-operation, and spiritual development are also critical. A remark by a villager in Longana captured the essence of this multidimensional perspective on development when he pointed out that "there is spiritual development in Longana but there has been limited physical development" (field notes, Longana, 1991). The work of the missions in the area had been essential in creating a path towards prosperity through encouraging villagers to work co-operatively and in harmony. However, there had been less progress with development of the material attributes of life in Longana. The extent to which changes in the cash economy and infrastructure associated with development have led to greater prosperity is best assessed with reference to each of the study areas in turn.

7.1.1 Mota Lava

Copra production has remained the basis of the cash economy on Mota Lava. The sale of other commodities, including handicrafts, kava, fish products and livestock has contributed small and highly variable amounts of income to households in Nerenigman, as has the hire of household utilities, casual wage employment and receipt of remittances from relatives outside the island. However, it is clear from an examination of evidence on the household economy collected by Campbell in 1981, and field research in the village in 1991, that opportunities for households to diversify and extend sources of cash incomes on Mota Lava have been very limited since independence.

Post-colonial development on Mota Lava has also been characterised by limited infrastructure expansion. There has been a decline in the economic performance of co-operative societies. These societies, which effectively controlled the island's cash economy in 1980, have been replaced by a number of small trade stores which, in 1991, offered a very limited range of consumer goods for sale to local villagers. Mota Lava's integration into the national economy has improved with the development of air transport, but shipping services to this remote island remain infrequent and unreliable.

There has been some decline in the quality of the educational infrastructure. The French-medium school is no longer maintained or staffed at levels common before independence. There has been some compensation in terms of expansion in the English-medium school. More generally, funds for the maintenance of existing infrastructure on the island, such as water supply and roading, have been inadequate to cover costs. In 1991, for example, the piped water supply system was not operational and there was no motorised road transport in working order. Part of the reason for the decline in quality of some of these services is the limited revenue generating capabilities of the Local Government Council. It was shown in Chapter Six that revenue raised by the LGC was well below that required to maintain the water supply system. The difficulty of raising revenue by the LGC is closely related to the limited range of opportunities which villagers have for earning income from cash-generating activities.

Opportunities for progressing with prosperity on Mota Lava depend, in large measure, on the price for copra. The decline in copra prices since the mid-1980s has affected the profitability of co-operative societies and the small private trade stores. Household incomes remain small, and there is little evidence that material living standards have improved much on the island since independence. Even though many of the residents of Nerenigman stated they were content to remain on the island, it seemed, in 1991, that an "infinite pause" in development had settled on Mota Lava.

7.1.2 Longana

Evidence of increasing levels of prosperity since independence was not hard to find in the Longana area. In addition to the development of a commercial centre at Lolowai, there had been a significant shift in the structure of the agricultural economy. Copra, which had been the main cash crop in the early 1980s, was no longer the most important source of income. By 1991 kava production for sale was generating much larger household incomes than had been received from copra except in years when the price was unusually high. Livestock production was also an important source of income for some households.

Accompanying an increase in cash incomes was a trend towards more intensive movement of villagers between their rural homes and the main towns, especially Luganville. Proximity to Santo favoured this interaction, as did the frequent calls by inter-island ships and planes. The range of services and facilities available to villagers in Longana was greater in 1991 than in 1980. This part of rural Vanuatu had not stagnated during the post-colonial period, although prospects for further improvements in cash incomes and infrastructure depend heavily on a sustainable demand for kava and livestock. There had been a move towards greater rural prosperity in Longana, even if the benefits of development during the 1980s had been shared unequally among residents.

Inequality in access to resources has been a characteristic of Melanesian village life for centuries. It is regarded as natural and not necessarily a problem since the more affluent people tend to conform to cultural norms about "redistribution, reciprocity and generosity" (Rodman, 1987:163). It is in this context that the Melanesian "wantok" system plays a significant role in helping those who are unfortunate in not having ready access to land or material goods. There is little doubt that inequalities between individuals and households are widening, and that a more entrenched differentiation between an incipient bourgeoise, a peasantry and a landless proletariat is emerging in rural Melanesia. However, in Nerenigman village and the hamlets in the Longana area in 1991 this differentiation had not produced evidence of the rural depression and poverty anticipated by Hau'ofa.

7.2 Towards "balanced" regional development?

In a draft Chapter of the Third National Development Plan (DP3, 1992-1996:6), it is stated that:

> In rural Vanuatu...economic growth in the agriculture sector decreased by an average of 2.0% per year between 1983 and 1989; given an annual rural population growth of 2.1%, the result was a decrease in per capita income of 4.1% per annum.

This observation indicates clearly that population growth has tended to outpace economic growth since independence. It also raises questions about the extent to which the national government's policy of promoting "balanced" regional development, with a view towards creating a more prosperous rural society, has been achieved. The decrease in per capita income is closely related to the sharp decline in the world price of copra during the 1980s - a decline determined by external market forces over which the government of Vanuatu has little or no control.

When Vanuatu gained its political independence in 1980, development infrastructure was fragmented. A system of decentralised administration, focused around 11 Local Government Councils responsible for overseeing development of infrastructure in different parts of the country, was promoted in the national development plans. By the early 1990s the regional administration had been established, but its resource base was very limited. The reality of a strong regional dimension to planning and investment, designed to promote commercial and infrastructural development outside of the major urban areas, has still to be achieved in Vanuatu, despite a decade of rhetoric about the merits of decentralised administration.

The issue of an effective administrative infrastructure for facilitating regional development has been debated widely in Melanesia. Experiences in Papua New Guinea, which has gone further than most countries in the region towards establishing strong Provincial Governments, have been mixed. The 18 years of post-colonial social and economic change in Papua New Guinea have not produced more "balanced" regional development. In the Solomon Islands, Mamaloni (1981:80) was arguing as early as 1980 that

> for an already fragmented society the effects of multiple agencies advocating multiple systems under multiple authorities have been disastrous. The district dweller is pressured from every angle...The final verdict is that local councils are poor, inefficient and hampered.

Local Government Councils in Vanuatu vary enormously in terms of their capacities to generate revenue for meeting the cost of development infrastructure and services. In most regions their performance in this regard has been below expectation. This, in turn, has affected their potential for supporting rural development programmes in the island communities. The larger islands with their established commercial infrastructure, such as Malakula, Santo and Efate, have continued to prosper in relative terms compared with the regions of smaller islands. In the context of increasing demand among rural residents for higher material living standards, and access to a wider range of cash-generating opportunities, it might be argued that an objective of achieving "balanced" regional development is much more difficult. Oxenham (1981:105), in the conclusion to a series of essays on rural development in the Solomon Islands, raises an important question in this regard

> can the same kind of life enjoyed in towns be extended to the rural areas - or must we think of a totally different kind of life there? Is one of the problems of rural development people's imagining that whole countries must become extended towns?

7.3 Towards rural development? A Melanesian perspective

Wichman (1992) argues that planning for rural development in island countries should take account of villagers' perspectives. His advocacy for "reversals in rural development planning", where people's perspectives with regard to development become priorities for assessing appropriate programmes, is also relevant in Melanesia. In the late 1980s leaders in Melanesia were arguing that rural development should proceed at "our own pace" so that villagers were not adversely affected by a too rapid development process. This view was captured in a Foreword by Pais Wingti in a book written by Samana (1988). He argued that

> we begin our development process by organising our people, empowering them with appropriate technology and education and assisting them to develop their resources at their own pace. Such development must be within their own means and must be directed to meeting the basic human needs of food, water and shelter as well as leading to a solid basis for economic and political autonomy...

Wingti (1988:xv) continues to argue that "Melanesians [must] pave their own way out of the confusion of the many "isms" to better their livelihood". This implies that the path to greater prosperity cannot be measured entirely in terms of Western-style capitalist development. Melanesian values must also be considered, as well as the material aspirations and changing lifestyles of rural residents.

Melanesian leaders argue that rural development should take into consideration what people already know and have. If this is done then, in the long run, the attraction of towns and town-style living for rural villagers may diminish. Samana (1988:8) supports the view that small-scale rural development projects rather than large-scale resource developments are likely to create more cash economic activities for Melanesians who wish to remain resident in rural areas. This is because these types of activities can be effectively carried out by Melanesians themselves on the basis of what they already know and have, rather than depending on multi-national companies which, in terms of their structures, are oriented towards the world capitalist economy.

A prevailing Melanesian perspective on rural development is one that integrates both tangible and intangible elements which rural Melanesians can use to further their quality of life. It is essential to involve local people in the decision-making process relating to rural development initiatives that are designed to bring prosperity to them. This is because carrying out rural development initiatives in the absence of local people's effective participation in decision-making deprives them of their rights to benefits that come from the development of their own resources.

Samana (1988:78) argued that being too dependent on capitalist countries for assistance will ensure that "our freedom to choose our own path of development will be limited" and not much progress to prosperity at a village level will be achieved. It is in this context that Narakobi (1985:449) stressed that honest and unselfish leadership is needed to "inspire rural Melanesians to rise from tribalism into modern, industrial and industrious nations that are unmistakably Melanesian". Thus rural development in Melanesia should be based on a perspective that embodies the notion that the fruits of capitalist development should be for the betterment of the rural people rather than for selected, largely, urban elites. In this context Kome (1981) points out that development must have real meaning, not just for the people in the wage employment sectors, but for the people in the rest of the country too.

These views capture the essence of the argument presented in Chapter One. Rural Melanesians want the benefits of capitalist-style development. While the intangible and cultural aspects are important, most villagers in Melanesia also express a real desire to participate in the capitalist system and to share some of the material benefits of that participation. It is in this context that this thesis examined aspects of cash-generating activities of rural communities in the study areas. The villagers' integration into the modern cash economy in the Longana area and to a lesser extent in Nerenigman clearly suggests this desire for capitalist development, but not at the cost of important Melanesian values. In Narakobi's (1985:447-450) words "while nothing will change the Melanesian character of Melanesians, modernisation is changing the face of Melanesia...Money, machines and social structures are instruments to be used responsibly to create a new society inhabited by new Melanesians".

APPENDIX I

HOUSEHOLD SCHEDULE. Towards Prosperity?. Rural and Regional Development in Vanuatu since independence, Geography Department, University of Waikato, N.Z. FORM A

Date of interview.____________ Interview location.___________ Interview number.__________

PART A: DEMOGRAPHIC DETAILS.

Instruction: a) Information in the matrix below is to be provided for every member of the household resident and does not include absentees (those away from the village).

b) Answers to questions 1-35 in this form are to be provided by the head of the household.

No.	Name.	Sex.	Rel. to H.H	Birth date.	Home village/ island.	Marital status.	Educ. level attained.	Current activity.
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								

c) Comments:

d) The matrix below is to be filled in by the head of household (H.H) for those members of the nuclear family who are absentees (those away from the village).

No.	Name.	Sex.	Rel. to H.H	Birth date.	Home village/ island.	Marital status.	Educ. level attained.	Current activity	Nuclear family absentees.		
									date left	date of last visit	last remittance (date and what?)
1.											
2.											
3.											
4.											

FORM A (continued).

PART B: ECONOMIC CHARACTERISTICS AND INCOME GENERATING ACTIVITIES OF HOUSEHOLD (information on physical characteristics of landuse, and the nature of cash-generating activities).

1. How many gardens does your household currently have under cultivation this season (1990) (those gardens with food crops already planted)? ____________

a) Also collect information on:
   i) old gardens from which food is still gathered. ____________

   ii) new land clearing, if any. ____________

2. Have the present gardens expanded in terms of land area cultivated as compared to the last farming season in 1990 or 1989? ____________

3. If there has been any change in size and intensity of gardens cultivated in 1991 as compared to 1990 or 1989 planting seasons, indicate with a ( ) how this change has taken place?.

   a) more land used for garden(s). ___ reason(s). ____________

   ____

   b) less land used for garden(s). ___ reason(s). ____________

   ____

   c) planting more varied food crops than before in 1990 or 1989. ____________

   reason(s). ____________

   ____

   d) planting a mixture of food and cash crops. ____ reason(s). ____

   ____

   e) no significant change. ____ reason(s). ____________

   ____

   f) others, specify? ____________

   ____

4. Where is the garden located?.________ Is it on: a) own land.
   b) other clan land (no rent)?_________ c) used or rented temporarily from some one else?______ If so, what relationship to you or your wife?______________________________

   ____

5. If rented or borrowed, how long has the land been used now?_____

6. If land is being used or rented, what is the method of payment to the custom landowner? ______________________________

7. What are the main food crops grown in this garden (itemise and also include fruits and nuts)?

   ____

   ____

   a) are any of these crops also sold for cash? ____If so, which ones? ____

   ____

8. Itemise any other cash crops grown together with food crops in this garden.

   ____

   ____

   ____

9. If your household sold any of the food crops grown in the garden referred to in question number 8 for cash income, what was sold and where? ______________________________

   a) approximate cash generated in the last month, if any. ________

10. Who usually in your household would sell food crops from the garden for cash?______________________________________

    ____

11. Does your household face any problems with the sale of food and cash crops?_____ If so, identify these problem areas.

    a) problems related to the sale of garden crops.______________

    ____

    ____

    b) problems related to the sale of cash crops. ______________

    ____

12. If these are the major problem areas related to marketing of garden food and cash crops in this village, what suggestions do you have for improvement? ______

______

______

13. To what extent have your garden practices been influenced by Government policies which relate to agricultural diversification and a push to expand exports? ______

______

______

PART C: INFORMATION ON COCONUT PLANTATIONS AND CASH CROPS.

14. Does your household own any coconut groves from which you make copra? ______ If so, where? ______

15. If outside of this village/island what mode of transport do you use to get there? ______

16. Apart from making copra from dried coconuts, what other commercial purposes are the by-products of coconuts used for?

______

______

17. If your household has coconut groves, do you also raise animals or plant any other cash crops within the same block of land? ______ If so, what? ______

18. Does your household have any other coconut groves you have access to on mother's or father's side? ______ If so, where?

______

19. If outside of this village/island what mode of transport do you use to get there? ______

20. When was the last time your household made copra for sale? ______

a) how many bags? ______

b) who did you sell to? ______

c) approximate value per bag? ______

21. Has there been any change in the number of copra bags sold by your household in the last two (2) years? ______ When? ______ and reason(s) ______

______

22. When making copra, what role do the rest of your family or household play?

    a) wife. ______________________

    b) son. ______________________

    c) daughter ______________________

    d) others, specify. ______________________

23. When there is a peak demand for you to make copra (such as palms having more dried nuts to collect or high copra prices), do you seek assistance from other people in the village? ____ If so, what form is the assistance provided? ______________________

    ____

24. What is the mode of payment for this assistance received from the fellow villagers? ______________________

    ____

25. What particular organisation do you usually sell your copra bags to? ______________________

26. What is the mode of transport used to deliver your copra bags to a market place or site of collection for sale? __________

    ____

27. To what extent has the Government policy, as related to export expansion, influenced the need for your household to participate in copra production? ______________________

PART D: LIVESTOCK.

28. Does your houshold raise any of the livestock listed below?

    a) pigs. ________ how many? ________

    b) cattle. ________ how many? ________

    c) chickens. ________ how many? ________

    d) others, specify. ______________________

    ____

29. What are the main reasons for your household raising these livestock? ______________________

____

____

30. If your household sold any of the livestock listed above in the last two (2) months, what was sold and where? ______________________

____

____

a) approximate cash generated in the last six (6) months.

____

31. Does your household face any problems with the sale of livestock products?________ If so, what are the main problem areas? ______________________

____

____

____

32. What suggestions can you make for improvement?______________________

____

____

____

PART E: GENERAL.

33. State below the type of "development" assistance you have sought or received from the following Departments or organisations in the last 12 months, noting what this assistance was for?

Organisation.	Type of assistance (and amount?).	Reason for assistance.
a) DALF.		
b) Dept. Local Gov't.		
c) Mission/church groups.		

 FORM A (continued).

Organisation	Type of assistance (and amount)	Reason for assistance
d) Development Bank.		
e) Health Department.		
f) any other, specify.		

34. Apart from food produce, cash crops and livestock which is produced or raised as a potential source of cash income for the household, indicate below with a (✓) other informal cash economic activities your household performs in order to raise additional revenue.

Activity type.	(✓) source.	Approx. income 1991.
a) handicrafts and other home products.		
b) cash generated from the sale of economic trees (fruits and nuts).		
c) income from hire of labour.		
d) fish products.		
e) hire of any household belonging.		
f) any other, specify.		

35. Indicate below by way of a rank order the following cash earning activities seen as most suitable to your household or village. Rank them in order of weight/seen as most important activity to the household.

- [ ] production and sale of surplus garden food crops.
- [ ] production of other minor cash crops such as pepper, cocoa, rice and ground nuts.
- [ ] production of copra.
- [ ] wage employment in a town.
- [ ] small-scale coastal fishing.
- [ ] forestry development for local supply of timber (i.e. small scale saw mill industry).
- [ ] any other, specify.________________________

____

VILLAGE CAPITAL RESOURCES INVENTORY. Towards Prosperity?. Rural and Regional Development in Vanuatu since independence, Geography Department, University of Waikato, Hamilton, New Zealand. FORM B

Date of interview.______________ Interview location.______________ Interview number.______________

Instruction: This form is only applicable to those villagers who own any kind of capital assets worth more than $100.00 (10,000 vatu) and used in some form of economic "development" activity. One form is to be filled in by each respondent.

Name. (1)	Item. (2)	Number owned. (3)	Type of ownership. (4)	Initial capital injection. (5)	Sources of funding (6)	Type of operation performed. (7)

Note: See notes on the matrix at the back of this form.

NOTES ON MATRIX.

1. Write the name(s) of the owner(s).

2. List items owned.

   a) Public Motor Vehicle (buses, taxis etc.).
   b) outboard motor.
   c) speedboat.
   d) canoes.
   e) refrigeration system(s).
   f) fishing nets.
   g) portable power generator.
   h) small canteens (clubs).
   i) water tap(s)/tank(s).
   j) copra driers/fermentaries.
   k) bicycle(s)/motor cycle.

3. Indicate the number of items owned by each respondent.

4. Type of ownership.

   a) individual.
   b) family.
   c) clan.
   d) communal.
   e) any other, specify____________

5. Indicate the total cost . of the item(s) owned.

6. Sources of funding for initial establishment/ current maintenance.

   a) individual effort.
   b) family contribution.
   c) village contribution.
   d) Local Government Council (LGC) funded project.
   e) mission funded project.
   f) Co-operative Department funded project.
   g) National Government funded project.
   h) Foreign aid funded project.

6. Sources of funding for initial establishment/ current maintenance (continued).

   i) village youth group.
   j) Womens Fellowship project.
   k) any other, specify________________

7. Type(s) of operation(s) performed.

   a) Transport modes: movement of goods, market produce and people between villages, islands or main centres.

   b) Refrigeration system(s): used as cool-rooms for storing meat and fish products etc.

   c) Portable power generator: source of power supply to the village.

   d) Fishing nets: i) catching fish to supplement other cash generating activities; ii) catching fish mainly for social ceremonies in a village; iii) catching fish for household consumption only; iv) others, specify.
   ____

   e) Small canteens/clubs: i) raising capital for repayment of loan(s); ii) raising extra capital for further investment; iii) raising money to meet bride-price requirements/payments; iv) easy access to the villagers for supply of European type goods and other items.

   f) Water tap(s)/tank(s): i) source of fresh water supply to the villagers; ii) others, specify______________

   g) Copra driers/fermentaries: i) for villagers involved in copra production; ii) others, specify___________

Note: Some of these items listed above may be used for hire purposes by the household. In this case it should be clearly stated in the relevant section of the questionnaire/matrix.

RURAL-URBAN MOBILITY, 1990-1991. Towards Prosperity?. Rural and Regional Development in Vanuatu since independence, Geography Department, University of Waikato, Hamilton, New Zealand. FORM C

Date of interview.-------------- Interview location.________________ Interview number.____________

Name.__________________

Instruction: This form is applicable only to those adults who are over the age of 20 years (includes men and women). This include moves made by men and women over 20 years for over one (1) week away from the village between January 1990 and date of interview.

Move No.	Where went?	When?	How long?	What for?	who did you stay with?	Travelled alone?/ with someone else? Who?	mode of transport used?
Last move							
Previous moves. 1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

(continued overleaf).

Move No.	Cost of travel.	Take any presents with you? If so, what?	When returned to village what did you bring back (e.g. gifts, presents?).	How did you cover cost of living at destination?
Last move.				
Previous moves. 1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

-1-

OPINIONS AND PERCEPTIONS SURVEY

Towards Prosperity?. Rural and Regional Development in Vanuatu since independence, Geography Department, University of Waikato, N.Z.

FORM D

Date of interview .____________________

Interview location.____________________

Interview number.____________________

Instruction: These questions are to be asked to a cross-section of a village population.

Note: Specify if any of the adult population interviewed are mission workers, private contractors/business firms, Local Government Council employees and any other.

1. Since independence in 1980, what have been the major socio-economic developments you have seen take place in this village or the surrounding neighbourhood?.

a) List of projects	b) When implemented/started?
i) ____________	____________
ii) ____________	____________
iii) ____________	____________
iv) ____________	____________
v) ____________	____________

2. If there have been some major projects implemented in this village, what have been the main reasons that contributed to this?.

____

____

3. What type of development assistance has this village received from

a) church organisations?.____________________

b) Local Government Councils?.____________________

c) Department of Co-operatives?.____________________

d) DALF extension staff?____________________

e) Rural Development Bank? ____________________

f) any other, specify? ____________________

____

4. Think of these projects in your village (schools, health centres, an airstrip, wharf and a road). What, in your opinion, is the most important project and a least important project?

   a) most important project.__________ reason(s).______

   ____

   ____

   b) least important project.__________ reason(s).______

   ____

   ____

5. If this village wanted to start a cash-generating activity on a communal basis, which of the following listed below would you see as most suitable?.

   a) piggery.______ reason(s).____________________

   ____

   b) cattle.______ reason(s).____________________

   ____

   c) poultry farm.______ reason(s).____________________

   ____

   d) small-holder cash project.______ reason(s).__________

   ____

   e) any other, specify.______________________________

   ____

   ____

6. Do the local trade stores operated in this village adequately provide basic consumer goods you wish to buy?_____ If no, how far do you have to travel to get what you need?,________ and how do you get there?______________________________

   ____

   ____

SMALL-SCALE COASTAL FISHERIES. Towards Prosperity?. Rural and Regional Development in Vanuatu since independence, Geography Department, University of Waikato, Hamilton, N.Z. FORM E

Date of interview. ____________

Interview location. ____________

Interview number. ____________

Instructions: a) These questions will be asked to those villagers who have taken up coastal fishing as a source of revenue raising activity based on a small-scale basis.

b) Indicate in the boxes provided with a (✓) the responses provided by each respondent to each question.

PART A: PERSONAL DETAILS.

1. Name. __________ 2. Sex. _______ 3. Date of birth/age. ________

4. Birth place. __________ 5. Home island/village. __________________

6. Highest level of education attained. __________________

7. Marital status. ____________________

PART B: QUESTIONS RELATED TO COASTAL FISHING BUSINESS.

8. What sort of fishing techinques/methods do you use?

☐ nylon fishing line and hooks.

☐ nets.

☐ spear guns (masket blong solwata).

☐ traditional fishing methods (nets/traps, poision roots).

☐ others, specify.

9. Fish you catch, is it mainly for

☐ sale at a market?

☐ have a contract with an institution (e.g. schools, health centre, mission station, hotels and guest houses).

☐ others, specify. ______________________________

10. Do you have problems with your fishing business? __________
If so, what? ______________________________

____

11. Are any of the following "problems" which you think are important?

☐ quality control (refrigeration, gutting etc.).

☐ transport to a market.

☐ too many people from the same village involved in fishing activity, thus too much competition.

☐ inadequate modern fishing equipment (e.g. fishing rods, diving equipment, coolers etc.).

☐ do not have own canoe or speedboat, therefore rely on fellow villagers for transport.

☐ is too expensive an operation (e.g. fuel costs, provision for modern fishing equipment etc.).

12. Since you started your fishing enterprise on a small-scale, what sort of assistance have you received from DALF, VFDP, LGCs, Co-operatives and any other organisation?.

a) Type of assistance provided. b) By whom.

☐ information provided on proper storage. __________

☐ helped with the marketing of fish products with the provision of cool-rooms and ice-making machines. __________

☐ subsidies given on equipment

and up-grading costs, fishing gear, motor and other equipment. ______________

☐ helped to seek loan from a financial institution. ______________

☐ others, specify. ______________

13. What type of transport do you use for your fishing activity?

☐ canoe with an outboard motor.

☐ canoe with no outboard motor.

☐ canoe with sails.

☐ speedboat with an outboard motor.

☐ other, specify. ______________

14. Where do you normally fish?

☐ customary fishing grounds (reefs).

☐ shallow water near an island.

☐ trawling in a deep ocean.

☐ others, specify. ______________

15. What was the value of fish you caught last month? ______________

16. Apart from fishing, do you also collect other live marine organisms?. ______ Indicate below which ones?.

☐ shellfish (including grinsnel, troka).

☐ mud crabs (krab), coconut crabs (krab kokonas), lobsters naora), prawns or cray fish.

☐ clam shells (natalae).

☐ sea slug.

☐ octopus (nawita).

☐ others, specify. ____________________

17. In the last month, did you sell any of these marine organisms? ________ If so, what was sold and where? ____________

____

a) approximate cash generated? ____________________

18. Do any other members of your household assist with the business? _____ If yes, what do they do? ____________________

____

____

TRADE STORE SURVEY Towards Prosperity?. Rural and Regional Development in Vanuatu since independence, Geography Department, University of Waikato, Hamilton, N.Z. FORM F

Date of interview.____________

Interview location.____________

Interview number. ____________

Name of trade store. ____________ Name of owner.____________

Date established.____________

Instruction: This form is only applicable to those villagers who own small trade stores or village clubs.

1. Make an inventory of goods/items sold in the trade store/club.

Item/brand.	Number.	Cost of item on shelf.
		Total value:

2. What was the initial capital investment for this trade store? ______
____

3. How was the capital raised? ______________________________
____
____

4. What has been the main reason for starting this operation?
____
____
____

5. Do you face any specific problem(s) related to this store's operation? ______ If so, specify. ______________________
____
____

6. Do you have any plans for expanding this store? ______ If so, what would be the main reason(s)? ______________________
____
____

7. Do you have plans to buy any major item(s) with profit from your store or club? ______________________________
____

8. Do you face any specific problems with the availability of your store stock? ________ If so, what and why? ____________
____
____

9. How can these problems be solved? Do you have any suggestions? ______________________________
____
____

10. Where do you get your store goods supply from? ____________
____

11. If outside of this village or island, what is the mode of

transport for bringing in these store goods? ____________________

____

12. How much, on average, do you pay for transport (passenger fare)? __________ and freight cost of the goods brought back?

____

13. Do you face any problems with credit?. ________ If so, what and how is this usually settled? ____________________

____

14. What other activities do you do in order to raise funds or supplement the successful operation of this store? __________

____

15. What are the most important items the villagers usually buy more frequently from this store? ____________________

____

____

16. How far into the neighbourhood do customers come to this store to purchase goods/items they want? ____________________

____

17. How do they normally travel to this village if your customers came from the neighbourhood villages? ____________________

____

____

APPENDIX II

Table 10.01 : Priority Areas of Development Activity Identified by LGCs

LGC Regions/Area Council(A/C)		Major Projects/Programmes/Activities Identified			
		Economic	Infrastructural	Social	Other
Banks/Torres:	Merelava	Livestock		Health Centre	Speed Boat
		Cashcrops			Boat Motor
	Ureparapara	Tourism	Airport	Dispensary	Boat Motor
				Staff-house	
				Maternity Ward	
	Vanua Lava	Tourism	Reef Clearing Unit	A/C Headquarters	Generator
	Merig/Gaua	Cattle	Warehouse	Boarding School	Ship
	Mota Lava	Fishing	Reef Clearing Unit	Boarding School	A/C Truck
	Mota	Cashcrops	Airport	Maternity Ward	Speed Boat
	Torres	Logging	Airport	Community Hall	Speed Boat
Santo Malo:	West Malo		Bush Clearing Unit	A/C Headquarters	Coolroom
	N.W.Santo	Timber	Water Supply	Primary School	Coolroom
	East Malo	Bank	Airfield	Extend Dispensary	
	West Santo	Cocoa	Water Supply	Medical Service	Coolroom
	P/Canal	Forestry	Water Supply	Dispensary	Helicopter
	N.E.Santo	Tourism	Water Supply	Aidpost	
	E.Santo	Dairy	Pekoa Extension	Dispensary	Ice Machine
	N.Santo	Rice	Warehouse	Health Centre	
	S.Santo	Forestry	Bridge	Health Team	Coolroom
Ambae/Maewo:	N.Ambae	Fishing	School Houses	Dispensary	Steel Tank
	S.Maewo	Forestry	Airport	A/C Headquarters	Speed Boat
	Ndui Ndui	Piggery	Wharf	Community Centre	Steel Tank
	S.Ambae	Forestry	New Roads	Dispensary	Extend School
	W.Ambae		Airport Extension	Community Hall	Tractor
				Water Supply	
E.Ambae		Cattle	New Road	Community Hall	Solar Power
N.W.Ambae		Kava	New Road	Dispensary	Steel Tank
		Foodcrops			
Ambae/Maewo	N.Maewo	Industry	Road		Telephone
			Water Supply		Teleradio
	LGC	Cooperative	Guest House	Community Hall	Trucks
Pentecost:	LGC	Cattle	Public Works Unit	High School	Tractor
		Cocoa	Public Road	Vocational Centre	Workshop
		Coffee	Airfield	Sports Stadium	Truck
		Fishing	LGC Building		Teleradio
		CC	LGC Staff Houses		Telephone
	N.Area	Demonstration Plot	Water Supply	Community Hall	Sewing Machine
			Warehouse	Health Centre	Truck
				Power Poles	
	S.Area	Cattle	Warehouse	Health Centre	Truck
		Cocoa		Community Hall	Power Poles
				Sports Field	Teleradio
			Training Centre		
	C.Area		Warehouse	Health Centre	Truck
				Power Poles	
Malakula:	E.Malakula	Block Industry	Wharf	Pre-school	Speed Boat
	S.W.Area	Forestry	Air Terminal	Hospital	Ship
	S.Malakula	Fishing	Wharf	Pre-school	Speed Boat
	N.W.Area	Cashcrops	Bridge	Pre-school	Fishing Boat
	N.E.Area	Abattoir	Airport	Secondary School	Cattle Badge
	C.Malakula	Fish Market	9 Km Road	Community Hall	New Bus
	LGC	Cooperative	Guest House	Community Hall	Speed Boat
Ambrym:	W.Area	Cashcrops		High School	Truck
	S.E.Ambrym	Oil Mill	Bush Clearing Unit	Hospital	Truck
	N.Ambrym	Cashcrops	Airfield	Technical School	Speed Boat
	LGC	Cooperative	Copra Drier	Community Hall	Truck

Paama:	LGC	CC Coconut Shell Venture Cottage Industry Furniture Business Block Industry Cashcrops	Airfield Air Terminal Wharf Roads Guest House Water Supply Warehouse	Health Centre Museum Building Secondary School Community Hall Council Houses School Houses Clinic Houses Classrooms Sports Field	Solar Sawmill Speed Boat Truck
	S.Area				Teleradio
	N.Area			Vocational School C/Training Centre Council Building	Teleradio
Epi	LGC	Fishing Poultry Piggery Cattle Cashcrops Forestry	Wharf New Roads Bridge Air Terminal Bush Clearing Unit	Council Building A/C Building Vocational School C/Training Centre High School Ext. Upgrade Aidpost Pre-school Health Centre Ext.	Generator Tractor Garage Telephone Speed Boat Teleradio
Efate:	East	Cattle	Roads	Vocational School	Fishing Boat
	Emau	Tile Industry	Airport	A/C Building	Speed Boat
	Ngua/Pele	Cattle	Wharf	Club House	Fishing Boat
	Efira		Electricity	Community Hall	Fishing Boat
	S.Efate	Tourism	Airport	Vocational School	Fishing equip.
	Erakor	Fishing	Roads	Secondary School	Slasher
	N.Efate	Cattle	Water Supply	School Buildings	Generator
Efate	LGC(women)	Poultry		Community Hall	Speed Boat
	LGC	Joint Venture	Seal Roads	Pre-school	Cargo Boat
Tafea:	S.Tanna	Rice Development	Road	New School	Telephone
	Ancityum	Logging	Wharf	Studio 6	Steel Tanks
	Erromango	Fishing	Water Supply	Bilingual School	
	Futuna	Forestry Fishing	Road	Studio 6	Ice Machine
	Aniwa	Piggery	A/C Houses	Pre-school	
	E.Tanna	Fishing	Water Supply	Radio Studio	Telephone
	W.Tanna	Forestry	Airport Water Supply		Water Tanks
	N.Tanna	Fishing	New Roads	School Buildings	Tractor
S/Tongoa	Tongoa	Livestock	Airport Air Terminal	School Buildings	Tractor
	Emae	Poultry	Road	Pre-school	Ship
	LGC	Poultry		Community Hall	Plough

Source: Republic of Vanuatu (1989:167-170)

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