



A Policy Document of the Republic of the Fiji Islands



RURAL LAND USE POLICY FOR FIJI

Rural Land Use Policy for Fiji

Prepared by
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on behalf of the Ministry of Agriculture, Sugar and Land Resettlement
for the Republic of the Fiji Islands

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Contents

Contents	iii
Acronyms	iv
Foreword	vi
Preface	viii
1. Background	1
1.1 Introduction.....	1
1.2 Constraints and Issues.....	2
1.3 The Need for a Rural Land Use Policy.....	4
2. Rural Land Use Vision	5
3. Rural Land Use Policy Principles	7
3.1 General Policy Issues	7
3.2 Policy Principles.....	7
3.3 Policy Needs	8
4. Proposed National Policies	11
5. Implementation	22
6. Reference	22
7. Appendices	23

Tables

Table 1: Typology of Governmental decision-making levels	9
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Acronyms

ALTA	Agriculture Landlord and Tenants Act
FLIS	Fiji Land Information System
GIS	Geographic Information System
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation)
LCB	Land Conservation Board
LWRMD	Land and Water Resource Management Division, MAFF
MAFF	Ministry of Agriculture, Fisheries and Forests
NATCO	National Trading Corporation
NCOLP	National Code of Logging Practice
NGO	Non-Government Organisation
NLTA	Native Land Trust Act
NLTB	Nature Lands Trust Board
NPO	National Planning Office
PWWS	Public Works, Water and Sewerage Department
SIFM	Sustainable Indigenous Forest Management
SPC	Secretariat of the Pacific Community
TCPD	Town and Country Planning Department
UNCED	United Nations Conference on Environment and Development

Foreword

Fiji's economy and society as part of the global community is undergoing constant change and its lifestyle is in transition. Many tensions are created by change, which may put the natural resources at risk. Sources of conflicts include the traditional way of life and rights of farming communities versus the needs of expanding urban and industrial centres, the rights of use of land and water, electric power generation, and the need for settlement of the landless. The need to intensify the use of the land for agriculture versus the need to sustain forests and biodiversity is another key issue. Today, the call for access to land is accompanied by the call for access to income. This is forcing us to reconsider our existing concepts and to analyse the new demands on land, agriculture and lifestyle, which in turn require new policies.

Fiji, like the rest of the world, is facing the challenge of balancing the needs and wants of higher living standards and economic growth against the maintenance of the environment, which is the very foundation of prosperity. There is an increased awareness that an integrated institutional approach is necessary to cope with those challenges. Such an approach gives due attention to all potential functions of the land in order to sustain it in the long term. An integrated approach takes into account the needs and aspirations of all population groups that have a stake in the future of the land – all this against the backdrop of increasing scarcity of land and its diminishing quality in relation to increasing population pressure.

Fiji is mainly a country of agriculture and forestland with expanding industrial development. Its economy is agrarian based. The process and rate of destruction of Fiji's natural resources have become a concern. Accordingly, as prerequisite for managing the change, it is essential to have in place an overall, broad, long-term land use policy and plan. These would furthermore indicate the direction in which major developments should proceed.

There is an urgent need to implement policies that will ensure that development is sustainable in a true spirit of constructive co-operation between all appropriate sectors. This spirit is reflected in Agenda 21, the inter-governmentally agreed action programme of the 1992 United Nations Conference in Rio de Janeiro, and the ensuing discussions in the UN Commission for Sustainable Development (CSD) created at Rio to monitor the progress at international and national level. The land cluster of that action programme, Chapters 10 to 15, is of relevance; Chapter 10 is entitled 'Integrated Approach to the Planning and Management of Land Resources'.

At the end of 1998, the SPC/GTZ Pacific-German Regional Forestry Project, collaborating with the Land Use Section, Research in Koronivia since 1997 (now Department of Land Resources, Planning and Development - DLRPD), welcomed the opportunity to contribute to a Rural Land Use Policy for Fiji. We acknowledge the good use made by DLRPD of the German assistance and the impressive effort that have resulted in a Review Report and Policy Statement on Rural Land Use in Fiji. The draft report and policy were presented at two stakeholders' workshops and the views and opinions from the workshops have been incorporated in the papers.

The papers produced provide an excellent example of commitment and assistance to the people of Fiji. Special appreciation must go to the primary authors of the report, Mr Inoke Ratukalou and Mr Dave Leslie, who brought the information together in such a cohesive way. Thanks also to the workshop participants for their valuable contributions, which made the report more meaningful. With gratitude we also acknowledge the editing by Mr Robin Yarrow.

The *Review of Rural Land Use in Fiji Islands: Opportunities for the New Millennium* report contains a valuable synthesis of previous national reports and studies concerning sustainable development in Fiji. The report further signifies issues and constraints in development and the resolve to take immediate action upon the burgeoning environmental problems now evident in Fiji. The report gives basic information on planning procedures and processes to facilitate change. There is a wide understanding that sound planning and management are crucial and will be so increasingly in the future, to impress upon government the urgency of the need to adopt the Policy Paper.

The *Rural Land Use Policy for Fiji* and its supporting documents reflect the commitment to find sustainable mechanisms of development that will create the necessary preconditions to achieve environmentally sound, socially desirable and economically appropriate forms of land use. This commitment is accompanied by an awareness that this is especially urgent due to the scarcity of land resources and the fragility of the environment.

The Rural Land Use Policy document is welcomed as tangible evidence of the mutually beneficial relationship existing between all sectors involved with the sustainable development of Fiji's natural resources.

' It is thoroughly understood that the control of our lands is in our hands, but the owner of property has an important duty to perform... It is the bounden duty of landowners to utilise what they possess for the benefit of all. It is their duty to the State'

Ratu Sir Lala Sukuna, 1936



Honourable Mr Jonetani Galuinadi
Minster of Agriculture, Sugar and
Land Resettlement
Republic of the Fiji Islands
June 2002

Preface

Land Use is a dynamic process, changing over time because of a number of factors, including increasing population, income changes, technologies, the general structure of the overall economy and political policies. Fiji, like most developing countries, is facing the crucial issue of proper allocation and sustainable uses of its land and water resources. The endorsed National Rural Land Use Policy provides guidelines for the allocation and management of resources in the rural sector.

The current administrative and institutional framework responsible for resources allocation and management is highly sectoralised. Attempts at co-ordination have proved to be ineffective. These factors have constrained the development process, increased inter-ministerial friction and in many cases have promoted unsustainable use of resources. The endorsed National Rural Land Use Policy sets a platform for dialogue and collaboration among government agencies and stakeholders for proper planning and implementation of the proposed national land use plan.

The supporting report, “*Review of Rural Land Use in Fiji Islands*”, gives insight into the need to have a national rural land use policy and plan, describes previous studies and reports, the land and water legislations, the good and bad land use practices, their issues and impacts, the participatory process of land use planning, the availability of information on land resources and the need to request external assistance to implement new project proposals that need to address important issues before the national rural land use policy and plan is drawn up. We should all recognise that a sound rural land use policy and plan should manage land for sustainable uses, balance production with protection, enhance diversity, and leave an enhanced heritage for future generations. However, a holistic and multi-disciplinary effort is required from all stakeholders, with firm commitment from government and supporting political will, for the policy and plan to be workable and sustainable.

The *Review of Rural Land Use in Fiji Islands* and the formulation of the *Rural Land Use Policy for Fiji* represent an important step in the long-term process initiated by the 1992 Earth Summit in Rio de Janeiro. One of the major outcomes of this Conference was Chapter 10 of Agenda 21, entitled, ‘Integrated Approach to Planning and Management of Land Resources’. In this Chapter, participatory approach to land use planning and sustainable land development are two of the key issues in the global debate on land resources and their development. The Conference also reinforced Fiji’s commitment as signatory to the United Nation’s Convention to Combat Desertification/Land Degradation, the United Nation’s Framework Convention for Climate Change and United Nation’s Convention for Bio-Diversity.



Mr Samisoni Ulitu
Deputy Permanent Secretary - Operations
Ministry of Agriculture, Sugar and
Land Resettlement

1. Background

1.1 Introduction

The Rural Land Use Policy presents rural land use policies for Fiji, including a vision, the underlying principles and the agencies responsible for implementation.

This policy document and the background supporting report "Review of Rural Land Use in Fiji – Opportunities for the New Millennium" (Leslie and Ratukalou, 2002) were prepared during 2000 with the support of the SPC/GTZ Pacific-German Regional Forestry Programme. The final documents incorporate comments and outcomes from circulated draft reports and policy workshops held in Fiji during July/August 1999.

There have been many discussions and a number of papers written about the need for a national land use plan and policy. In 1960 the Commission of Enquiry Report into the Natural Resources and Population Trends of the Colony of Fiji (known as the Burns Report), recommended that Fiji needed an overall long term land use plan and policy to guide farmers on the most appropriate crops that might be grown in the different ecological regions of the Colony.

Through the 1970s and early 1980s, several attempts were made to establish a national body that could deal effectively with co-ordination and proper use of the land resources of Fiji. Early studies and reports have noted that most arable land was occupied. Future development would necessarily be on hilly land. The buoyant agriculture sector of the 1970s was largely predicted because of the availability of unimproved land that could be brought into permanent cultivation. However, by the end of the 1970s, this expansion had approached its limits. There was consensus that a number of rural sector trends in the 1970s were creating a situation where fewer, rather than more people were participating directly in primary production. These trends were seen to relate in part to land availability and land quality, land tenure, labour mobilisation and, in the Fijian village context, a changing balance between subsistence and commercial agriculture.

A number of the previous studies identified that all those governmental organisations involved with land use and land administration had conservation responsibilities and that the Land Conservation Board had the lead role based on current legislation. However, it was commonly acknowledged that the Native Lands Trust Board (NLTB) and the Land Conservation Board (LCB) were not discharging their responsibilities. A new approach to conservation based on a combination of statutory controls, extension and land use planning was recommended in a number of reports. This last element planning – was based on the observation that the worst problems were related to inappropriate land use rather than bad management.

There is general agreement that Fijian land ownership and customary rights and their future management are central to sustainable development and sound environmental management. Difficulties of agricultural development were not seen as any serious deficiency in the natural resources, so much as the adverse relationship between farmers and their land. In the pre-independence days there were problems with the administration of land that led to land use problems.

Several bodies with their own agendas were pulling in different directions as far as land use development and conservation of resources were concerned.

The current administrative and institutional framework responsible for resource allocation and management is highly sectoralised and attempts at co-ordination have been ineffective. These factors have constrained the development process, increased inter-ministerial friction, and in many cases promoted unsustainable resource use. An integrated rural land use policy is needed to help guide and coordinate efforts for the wise allocation and management of resources in the rural sector.

1.2 Constraints and Issues

Sustainable development is a strategic choice that must be made by both developing and developed countries. For a developing country like Fiji, perhaps a precondition for sustainable development is development itself, ie, the path of economic growth must be taken first in order to satisfy citizens' desires for higher living standards etc before the conditions for supporting sustainable development can be provided fully. While Fiji's economy undergoes development, it will be necessary to ensure rational utilisation of natural resources and protection of the environment.

Agriculture is the basis of Fiji's national economy. Only with sustainable agriculture and rural development can overall sustainable development in Fiji be assured; it therefore deserves high priority among national development goals.

Demands on the land resources are increasing. If the on-going expansion of commercial cropping onto marginal lands, cropping on fragile soils without land conservation practices in place, deforestation and burning of grasslands continue, then Fiji will experience further land degradation, lower yields and an increase in poverty. It is not too late to reverse the current trends but it will require a far-sighted government with determination to implement land use policy for sustainable development. The policies must be supported by technical teams. These teams will provide sound information and operate in an integrated manner with a commitment accorded to farmers and other rural stakeholders who have a stake in sustainable land management.

A sound rural land use policy should manage land for sustainable uses, balance production with protection, create diversity and leave an enhanced heritage for future generations.

There have been many discussions and a number of papers written about the need for a national land use plan and policy. Cabinet in 1995 approved the concept for a comprehensive and integrated new Sustainable Development Bill which would revise and consolidate existing environmental and resource management legislation and create new legal frameworks, among others, for integrated resource management. More recently Ministry of Agriculture, Fisheries and Forests (MAFF) recognised the importance of reviewing current rural land use practice, previous studies, legislation, issues and constraints in advance of developing policy.

The primary rural land use issues are analysed and summarised as follows:

1. Increases in Fiji's population over recent decades have placed pressure on the land, particularly marginal land, and this has resulted in significant land degradation and soil erosion. Land availability and quality, land tenure, labour mobilisation, depopulation in some outer islands and sugar cane areas and, in the Fijian village context, a changing balance between subsistence and commercial agriculture are all factors why fewer people are being supported directly in primary production.
2. The environmental impacts of uncontrolled urbanisation combined with land degradation are seriously impacting on the quality of living and the sustainable income-generating capacity of Fiji's natural resources.
3. Soil loss measurements clearly demonstrate that the agricultural productive base in many sugar cane areas, and with ginger on slopes, is running down at a rate that is well above what would be regarded as economically acceptable.
4. Because of the predominantly poor adoption and application of land husbandry practices and the resultant degradation of land and water resources, the impacts from natural disasters are becoming increasingly more acute, in particular, vulnerability to droughts and flooding.
5. There is serious under-resourcing by Government for line ministries having responsibility for agriculture, forestry and land use in general and the public sector commonly lacks effective funding, resources and trained technical staff to undertake environmental planning, management and enforcement.
6. Expertise in the areas of agricultural extension, soil conservation, land use planning and environmental planning, management and enforcement is below critical mass in the responsible line ministries.
7. The resources devoted to soil conservation are inadequate for the implementation of significant measures, either in terms of providing information or incentives, and there is a reluctance by NLTB to exercise its legal rights with respect to bad land husbandry practices.
8. There is a poor awareness of the interdependence of conservation and development. There are widely held views in some influential ministries that conservation and environmental management are obstacles to development or, at best, irrelevant to it.
9. Poverty can be seen in all communities. The impact of poverty is offset by the relatively high level of subsistence and food security, but 25% are living below the poverty line and this has probably increased as a result of the impact on land use from the recent droughts and subsequent floods. Clearly, rural incomes have been reduced (both for farmers and those on wages) and greater rural unemployment exists as a result of these climatic events.
10. A major limitation to sustainable rural development in Fiji is the lack of a National Land Use Plan and an institutional responsibility for land use planning to facilitate the national plan. Land resources are limited and finite. If demographic trends continue there is an increasingly urgent need to match land systems, soil types and land uses in the most national way possible, to maximise sustainable production and meet the needs of society. Land use planning is fundamental to this process.

1.3 The Need for a Rural Land Use Policy

Land is the basic natural resource of all communities. A sound rural land use policy should manage land for sustainable uses, balance production with protection, create diversity and leave an enhanced heritage for future generations.

Land use involves natural ecosystems – the interactions between humans and the living and non-living things upon which they depend. Several distinct phases of land use in Fiji are identified:

- Subsistence shifting agriculture.
- Post-annexation European commercial farming (pastoralism, coconut estates, etc).
- Creation of the sugar-cane industry.
- Logging of the indigenous timber resource.
- Expansion of settlements and urban areas.
- Agricultural utilisation of marginal lands.
- Intensification of land use.

Conflicts between agriculture, forestry, tourism, biodiversity/conservation, urbanisation, mining, etc, should be avoided through sound multiple-use planning that flows from the adoption of a rural land use policy.

Lack of understanding of biophysical processes and trends and the failure to use information about the natural resources have led to land degradation, inappropriate land uses and increased the risk of drought and flooding.

The relative fragility of Fiji marginal lands may be debated. However, there is no question about the level of poverty in some of Fiji's rural communities – it is poverty that compels farmer families to further clear forest for subsistence agriculture, to become seasonal migrant labourers or make the move to seek employment in urban areas (mainly young adults).

Sectoral programmes such as soil conservation, land use planning, forestry, agriculture, will have only a limited impact as long as Fiji's economy languishes at its present level. The first pre-condition to the protection of the environment is the tackling of poverty levels in many of Fiji's rural communities.

There are three primary reasons why a formally adopted rural land use policy is required for Fiji:

1. An effective national policy is contingent upon informed public opinion as much as it is on legislation or the activities of sectoral interest groups; a policy can be an effective educational tool.
2. A policy provides a long-term national framework. If Fiji has a declared rural land use policy that is in harmony with national interests and enjoys public support, the potential to deviate from policy (for some short-time expediency) is greatly reduced. Any deviation from policy would be subject to public scrutiny and debate. Thus, policy can serve to set standards.
3. Decisions about land use are made continually by government ministries, other institutions and individuals. While most are not of great issue, others will have policy implications. Decision-makers will make more effective decisions if there is a clearly written and well-understood policy to provide guidance. Policy can therefore serve as a framework to manage change.

2. Rural Land Use Vision

Fiji's sustainable development will be based upon the sustainable utilisation of resources and preserving a healthy environment. The nation would be obliged to address the following broad strategies:

- Protecting the integrity of ecological systems and biodiversity,
- Reducing the rates and areas of land degradation,
- Protecting natural resources,
- Reducing damage to fragile ecosystems,
- Maintaining and extending indigenous forest and plantation forest coverage,
- Promoting sustainable farming systems,
- Improving rural environmental conditions,
- Encouraging the formation of Land Husbandry Groups,
- Preventing and controlling pollution, and
- Implementing international environmental accords to which Fiji is a signatory.

By the year 2010 the following milestones should be achieved:

- Environmental pollution is brought under control,
- Quality of the environment in rural towns and communities should have significantly improved,
- Degradation of natural and cultural systems will be significantly reduced,
- Land use planning controls forest areas (natural forests and plantations) and protects it against uncontrolled conversion
- Area of afforested land increased by 20%,
- Land use planning controls protect quality arable land from urbanisation,
- 50 fully operational Land Husbandry Groups,
- 15 forest native reserves identified and gazetted, and

The overall strategies that will ensure the realisation of the above-mentioned milestones include:

- Strengthening the foundations for sustainable development, in particular through establishing a policy framework; have a system of laws and regulations promoting sustainable development in place; and be outlining strategic objectives for sustainable development.
- Establishing natural resources and environment monitoring and management systems, natural resources statistics, planning and information support systems for social and economic rural development.
- Developing education, raising awareness of sustainable development issues throughout the nation and building capacities for implementing sustainable development practices.

Specific desirable elements in the vision include:

- A national land use plan is developed and implemented through a national and regional institutional structure with the process initiated and overseen by an independent National Land Use Council.

- A National Land Conservation Strategy for Fiji that identifies a number of land husbandry, land restoration and sustainable management goals and defines those actions necessary to achieve these goals. The strategies are being used as a basis for further development action-plans.
- Boards and Statutory Authorities responsible for implementing and enforcing law and providing technical advice to farmers are adequately resourced and supported by Government.
- Natural resource management, planning, environmental and rural land use legislation is reviewed and consolidated under a single and enforceable legal and institutional framework.
- Adverse effects and vulnerability of the rural sector to flooding, droughts, cyclones, etc, is significantly minimised through development of natural disaster mitigation plans.
- Land lease issues in the cane belt are satisfactorily resolved and certainty in land tenure is attained.
- Land Husbandry (Group) movement is established.
- Land degradation is reduced, environmental damage minimised and productivity from the land is improved and sustained through proper use and management,
- Availability of credit to the agriculture sector is improved.
- Rural sector industry emphasis is on value-adding processes, post-harvest quality control and marketing.
- Expansion and direction of urban areas is controlled by zoning maps and criteria designed to protect first-class soils for food production.
- Biodiversity and conservation issues are crucial considerations in the management of the indigenous forest resources.
- Diversified farming systems are widely practised.
- National Code of Logging Practice, including silviculture prescriptions, is universally adopted and adequate monitoring/enforcement mechanisms are in place and effective.
- Forest resources are being used sustainably and in the interests of stakeholders and the nation.
- Incidence of 'wild' forest fires in pine plantations and indigenous forests is significantly reduced as a result of effective education and public awareness campaigns.
- Sustainable non-sugar rural livelihoods are enhanced through efficient food security and competitive exports.
- 'Good' land with potential for crop diversification and intensification is available in suitable locations to accommodate displaced cane farmers.
- Level of land degradation within the cane belt is largely reduced due to adoption of 'best practice' farm management technologies.
- Effective farm extension programmes are established in the cane belt to advice on cane variety/soil matching, fertilisation, cultivation practice, and multi-cropping cane farming (including agroforestry).
- The incidence of cane and trash burning is decreased to a level of being a rare event.
- The area of sugar cane grown on slopes $>11^\circ$ is greatly reduced and alternative sustainable farming systems, including agroforestry and pine plantations, are developed on the vacated marginal cane land.
- Sugar productivity (cane/ha) is greatly increased and industry efficiency is improved.
- Displaced farmers wishing to continue to be involved in non-sugar commercial agriculture are satisfactorily resettled.

3. Rural Land Use Policy Principles

3.1 General Policy Issues

The following general principles have primary importance in developing a rural land use policy in Fiji:

- The rights and responsibilities of the state and international agreements to which the Government is a signatory.
- The rights and responsibilities of rural landowners, lessees and the State under the Native Land Trust Act (NLTA) and Agricultural Landlord and Tenants Act (ALTA).
- The rights and responsibilities of land resource managers (farmers, forestry companies, agribusiness [e.g., FSC] etc) including the responsibility for sustainable rural development and land resource management.
- The need to protect natural resources and ecosystems including opportunities for the restoration of these.
- The need to consider biophysical, cultural, social and commercial environments.
- The need to consider non-market values and market factors.

3.2 Policy Principles

Some of the principles guiding the formulation of the national policies include:

- Land – comprising soil, water and associated plants and animals, is among the major resources available for exploitation and sound sustainable management. Use of land resources should not cause their degradation or destruction, because human existence depends on their continued productivity.
- The paramount importance of land resources for human survival and welfare for national and economic independence, plus the rapidly increasing need for more food, should be recognised. Priority must be given to optimising land use, to maintaining and improving soil productivity and to conserving soil.
- Proper incentives and a sound technical, institutional and legal framework are basic conditions for achieving good land use. The land users themselves should be involved. Assistance to farmers and other land users should be of a practical, service-oriented nature.
- Certain land tenure structures may be obstacles to the adoption of sound soil conservation measures. The rights, duties and responsibilities of landowners, tenants and land users alike should be clarified.
- Land users and the general public should be well informed of the need for conservation and the means for improving soil productivity through education and extension programmes and training of agricultural and land management staff at all levels.
- To ensure optimum land use, a country's land resources should be assessed for suitability (with various levels of technological inputs) for different types of land use, particularly agriculture, grazing and forestry.

- Land having the potential for a range of uses should be maintained so that future options are preserved. Use for non-agricultural purposes should be regulated in such a way to avoid its occupation or permanent degradation and limit ill-considered expansion.
- Decisions about the use and management of land and its resources should favour the long-term advantage rather than short-term expediency that may lead to exploitation, degradation and the possible destruction of soil resources.
- Conservation measures should be included in land development during planning and the costs should be included in development planning budgets.

3.3 Policy Needs

An ethic of land husbandry or ‘stewardship’ and responsibility for future generations is a sound basis for soil conservation policy. Like agricultural policy, it must involve the many individual land users who control the day-to-day use of the land. Conservation policy is also ultimately dominated by institutional, economic and political influences.

An impediment to implementing land use policy is that many agencies are involved in various aspects of land management and a major institutional problem in Fiji is the lack of co-ordinated action and integrative mechanisms to facilitate co-ordination. Rural land use sector roles and responsibilities for MAFF Divisions and NLTB are given in Appendix 1.

For most environmental conservation issues there is the conflict between immediate gains and sustained yields. Exploitation for short-term gain may deplete soils and reduce long-term productivity. If the essentially non-renewable soil is to be available in perpetuity, the Government must influence the decisions of land users which are commonly based on short-term socio-economic or political factors. Such influence, taking a long-term view, may take the form of land use regulation, an institutional change, economic intervention or incentives for sustainable land use and management.

Short-term and long-term goals are confounded by conflicting objectives of the farmer and society. The farmers are expected to pay (in time, labour and money) for soil conservation and see little immediate return on their investment. To many farmers, exploitation of soil resources is an economically sound strategy, as any adverse consequences are felt by others, distant in time and location (ie, downstream).

The equitable distribution of benefits and costs is the primary outcome from a land use policy. The basis for an effective policy is identifying and quantifying the physical changes occurring in the soil resources and the processes occurring across the landscape. These changes can then be valued in monetary terms for each of the stakeholders involved (farmer, landowner, society at large, future generations and those impacted on through inappropriate land use practice).

Policy must consider on-site as well as off-site local, peri-local and remote impacts on land use. On-site changes from soil erosion, for example, may influence crop productivity and so affect the farmer’s income. Off-site changes from sediment transportation and deposition adversely affect a

variety of parties (individuals, industries, communities) in different ways (water pollution, sedimentation, loss of fish spawning grounds, dredging of waterways).

The typology presented in Table 1 builds a conceptual framework in which various policy activities are carried out.

Table 1: Typology of Governmental decision-making levels with associated agencies, tasks, measures, and tools

Decision-making and implementation level	Typical agencies	Management tasks	Specific measures	Analytical tools
Policy	Executive, legislature, National Planning Office and National Land Use Council	Formulation of national land use policies, priorities and programmes.	Establishment of policies, priorities and respective roles of co-operating agencies. Formulating regulations and incentives. Financial appropriation from ministries.	Identification and projections of national needs and potentialities.
Planning	Bureau for Land Use Planning	Develop a national (and regional) land use plan.	Setting priorities for land development and conservation. Matching land use with land resources and climate information.	Qualitative assessment of soil resources, land evaluation and use suitabilities.
Programme	Finance and implementation agencies at national and divisional level	Formulation and execution of specific land use and land and water management plans and programmes.	Financial appropriations from respective agencies.	Estimation of impacts of soil erosion and sedimentation. Cost-benefit analysis.
Practices	Implementation agencies at divisional and local level (MAFF, NLTB, TCPD, etc)	Implementation of conservation and land use plans on crown lands. Support and guidance for land use and conservation efforts on native and freehold lands.	Technical support, research, extension and implementation. Evaluation of needs. Administration of incentive programmes and regulations.	Detailed assessment of impacts of various programmes and interventions. Monitoring and evaluation.

The following principles were considered of importance when developing rural land use policy in Fiji:

1. Originally much of Fiji was covered in forest, and the climate and soil are well suited to supporting trees and perennial crops.
2. Sustainable farming systems, trees, agroforestry and forests play an integral role in soil and water conservation and management.
3. Sustainable rural land uses are capable of providing a wide range of multiple-use benefits, products and services.
4. Some land uses may not be desirable in all landscapes.
5. Sustainability of Fiji's natural environment and heritage are of paramount importance.
6. All land in Fiji should be used within its capability.
7. Land use decisions should be based on whole (watershed/regional) land management planning concepts.
8. A land use policy embraces all rural and peri-urban areas, irrespective of land ownership.
9. All land users and levels of government should meet their respective responsibilities in attaining sustainable rural land development and management.
10. There should be real and effective co-operation between all sectors of the community, government agencies and institutions involved in the rural sector.
11. The community adopts a land conservation ethic (a Rural Code of Land Use Practice).
12. A long-term planning perspective is taken.

4. Proposed National Policies

This study has identified outcomes that should evolve from the development of a rural land use policy and from the establishment of sustainable land use systems in Fiji. Note that the operational activities are specified and are implemented at a lower level of administration to that described below. The proposed national policies should be considered in conjunction with the relevant current national strategies and objectives (Appendix 2).

1. Increased public awareness that:

- a) Land resources, including soil, water and flora are interdependent and must be sustainably managed in an integrated way, and**
- b) The individual land user and the community have a responsibility for preventing and/or mitigating land degradation.**

Policy objectives include:

- 1.1 Assessing community and sectoral attitudes to land degradation and developing appropriate education and awareness programmes for sustainable resource management,
- 1.2 Conducting a programme to further public awareness and adoption of a sound land use practice ethic;
- 1.3 Ensuring the education system has quality teaching materials on the proper use of land and soil resources;
- 1.4 Encourage integrated and multi-sectoral agricultural planning and production systems;
- 1.5 Creating opportunities for community and land users involvement in planning and implementing sound land use practice programmes;
- 1.6 Increasing the skills, knowledge and understanding of sustainable rural land use systems amongst landowners and stakeholders;
- 1.7 Providing improved access of people living and/or working in rural areas to education and training services on sound land use practices; and
- 1.8 Publishing and disseminating the key materials in English and other vernacular.

Authority responsible: Agriculture Dept (Land Use, Extension, Information) and NLTB.

Primary collaborators: Education Dept; Dept Environment; Forestry Department; Min Finance and National Planning; Min Regional Development; Dept Lands and Survey; Dept Town and Country Planning; Fijian Affairs Board; relevant NGOs; Fiji Hardwood Corp.

Other co-operating parties: Women Dept; Min Health; Min Fijian Affairs.

2. Increased public awareness of the values of trees and forests

Trees and forests bestow multiple benefits on the environment. Combinations of these benefits will vary dependent on where the forest is and the purpose(s) for which they are managed.

Trees and forests provide:

- non-material values such as landscapes, catchment protection, erosion control, wildlife habitats;
- opportunities for forest recreation, amenity uses, education, and aesthetic values;
- sources of traditional and cultural values and products;
- sustainable production values for timber production, fuel wood and non-timber and other commercial forest products; and
- protection of specific biological values, ecological processes related to water quality, soil development, and microclimate.

2 a)

Policy objectives include:

- 2a).1 Encouraging educational institutions to include tree and forestry subjects in their core curriculum by providing relevant materials; and
- 2a).2 Encouraging the participation of all stakeholder communities in the planning and management of forestry activities.

Main authority responsible: Forestry Dept.
Other collaborating agencies: Agriculture Dept; Min Education; Min Fijian Affairs; Min Regional Development.
Other co-operating parties: NLTB.

2 b)

Policy objectives include:

- 2b).1 Developing of strategic guidelines for the public access into indigenous forests in consultation with landowners, affected communities and stakeholders;
- 2b).2 Encouraging land owners, timber licensees, tenants and other forest users to replant and protect remnant trees on farms and logged areas; and
- 2b).3 Encouraging wide dissemination of the results of scientific research.

Main authorities responsible: NLTB; Dept Lands and Survey.
Other collaborating agencies: Min of Fijian Affairs; Agriculture Dept; Forestry Dept; Fiji Pine Ltd; Fiji Hardwood Corp; Dept Environment, National Trust of Fiji.
Other co-operating parties: Dept Mineral Resource.

3. *A regulatory framework for the protection and sustainable development and management of rural land resources that recognises the following:*
- a) *The indigenous forests will be protected and managed for their biodiversity, conservation and production values by adopting Sustainable Forest Management (SFM) principles;*
 - b) *Protection of the environment and management of water, land, forestry and other natural resources will be conducted in an ecologically sustainable manner;*
 - c) *The planning processes need to outline strategies for prevention of land degradation as well as the symptoms;*
 - d) *The plantation forests must be managed and administered in a manner that sustains site quality;*
 - e) *Sound land use practices to maintain and sustain soil qualities.*

- 3 a) *The indigenous forests will be protected and managed for their biodiversity, conservation and production values by adopting SFM principles*

There shall be responsibility for further developing and implementing the already identified forest use classification based on a national forestry programme and appropriate legislation:

- (i) **Multiple-use natural forests** - where the indigenous forest is to be maintained under forest cover but to be used for timber production, catchment protection, wildlife habitat, recreation and amenity uses and for minor forest products.
- (ii) **Protection forests** - where the indigenous forest is highly sensitive because of the topography, climate, soil type or combination of these factors. Timber harvesting or other forestry operations are restricted to minor forest products or to non-mechanical timber extraction.
- (iii) **Nature and Forest Reserves, National Parks** - and other areas of known unique heritage, ecological and geological importance that should be protected for biological diversity and ecological values
- (iv) **Plantation forest** - where established plantation forest species are maintained on land identified under the natural Land Use Plan for timber production in a sustainable manner.

The formulation of a National Forest Master Plan (NFMP) will be the basis of an outcome of this process. The National Forest Master Plan will comprise of the national forest inventory and be compatible with other designated land use plans.

Policy objectives include:

- 3a).1 Ensuring that rehabilitation of indigenous forest is supported through education, readily available technical advice and information, and appropriate tree stocks availability;
- 3a).2 Ensuring that the appropriate policies, institutional arrangements and means of implementation are in place to identify, protect and manage representative examples of the habitats for all of Fiji's indigenous plants and animals; and

- 3a).3 Ensuring that the management of the forest (all forest types or classifications) is based on internationally recognised principles, criteria, and indicators.

Main authority responsible: Forestry Dept.
Other collaborating agencies: NLTB; Dept Environment; National Trust of Fiji; Fiji Hardwood Corp; Min Fijian Affairs; Dept Mineral Resources; Min Tourism; relevant NGOs.
Other co-operating parties: Dept Lands and Survey; Fiji Pine Ltd; Dept Works.

3. b) Protection of the environment and management of water, land, forestry and other natural resources will be conducted in an ecologically sustainable manner

Policy objectives include:

- 3b).1 Preparing a national strategy setting out clear goals for maintaining biodiversity as the first step in implementing the International Convention on Biological Diversity;
- 3b).2 Reviewing legislation governing conservation, protected areas and species, and resource management so as to provide a legal framework for protecting biodiversity and indigenous habitats;
- 3b).3 Developing a sustainable Environmental Strategy that will enable land users, and those who provide support and services to landowners and land users, to work together more effectively;
- 3b).4 Encouraging consultation and co-operation amongst ministries and agencies on environmental matters;
- 3b).5 Advising institutions and Government agencies on sustainable environmental practices; and
- 3b).6 Ensuring that people have the opportunity for effective participation in making decisions that affect the environment.

Main authority responsible: Dept Environment.
Other collaborating agencies: Min Finance and National Planning; National Trust of Fiji; Agriculture Dept; Forestry Dept; Dept Lands and Survey; NLTB; Min Regional Development; Fiji Pine Ltd; relevant NGOs.
Other co-operating parties: Min Fijian Affairs; Dept Mineral Resources.

3 c) *The planning processes need to outline strategies for prevention of land degradation as well as the symptoms*

Policy objectives include:

- 3c).1 Ensuring that an integrated research on sustainable land development in agriculture is undertaken within an agro-ecological framework;
- 3c).2 Ensuring that an effective communication takes place between researchers, extension staff and farmers, and that farmers' views on research needs and support are identified and understood through an integrated approach;
- 3c).3 Ensuring that researchers and extension officers working in rural development and land management are well trained and resourced;
- 3c).4 Ensuring that the different agencies working in rural development and land management fully understand their respective responsibilities for achieving sustainable rural sector development and management;
- 3c).5 Undertaking periodic institutional reviews of the effectiveness of both rural sector policies and their implementation;
- 3c).6 Ensuring that legislation is subject to amendments and revisions to any change in response to land use policies; and
- 3c).7 Formulating policies to intervene industrial and rural developments that contribute to land degradation or inappropriate land use.

Main authority responsible: Agriculture Dept.

Other collaborating agencies: NLTB; Forestry Dept; Min Regional Development; Min Finance and National Planning; relevant NGOs.

Other co-operating parties: Min Fijian Affairs.

3 d) *The plantation forests must be managed and administered in a manner that sustains site quality*

Policy objectives include:

- 3d).1 Ensuring sustainable management of forest plantations;
- 3d).2 Ensuring that sustainable management and/or rehabilitation of harvested areas with indigenous or exotic hardwood species is achieved by land use controls supported by legislation; and
- 3d).3 Ensuring that plantation forests are confined within existing plantation forested areas and on areas identified under a National Land Use Plan

Main authority responsible: Forestry Dept.

Other collaborating agencies: Fiji Pine Ltd; NLTB; Fiji Hardwood Corp; National Trust of Fiji; Dept Environment; relevant NGOs.

Other co-operating parties: Min Fijian Affairs.

3 e) Sound land use practices to maintain and sustain improved soil qualities

Policy objectives include:

- 3e).1 Ensuring the dissemination of sound land use practices and conservation principles through the establishment of demonstration sites and farms;
- 3e).2 Continuing to develop improved sound land use practices;
- 3e).3 Ensuring that Government's fiscal policies promote the use of land through proper land use practice and sustainable land use systems to ensure greater productivity;
- 3e).4 Developing land management skills and land use systems that will enable people and communities to provide for their social and economic well-being;
- 3e).5 Applying the principles of sustainable rural development and management throughout Fiji;
- 3e).6 Providing the technical resources to establish watershed-based land use planning committees and develop watershed management plans;
- 3e).7 Developing collaborative sustainable land management programmes between government departments and land husbandry Groups;
- 3e).8 Improving co-ordination between government departments and tiers of government so that land use policy and associated new programmes are understood and acted on;
- 3e).9 Promoting understanding between responsible agencies that assessment of soil resources and the capability of the land is used as a basis for planning the use of land and water resources;
- 3e).10 Ensuring agencies involved in planning appreciate the interdependence of land use and watershed management; and
- 3e).11 Integrating watershed management programmes that address environmental, economic, and social opportunities for watersheds through a strategic and participatory approach.

Main authority responsible: Agriculture Dept.

Other collaborating agencies: NLTB; Forestry Dept; Dept Environment; Fiji Sugar Corp; Min Regional Development; Min Finance and National Planning; Dept Town and Country Planning; relevant NGOs, Office of Prime Minister; Min Fijian Affairs.

Other co-operating parties: n.a.

4. *Appropriate mechanisms to protect farmlands and forests from fire, pests and pathogens*

Policy objectives include:

- 4.1 Establishing national co-ordination of research and extension control operations for pests and pathogens affecting crops and forests;
- 4.2 Reviewing current practices of pest control to ensure that they are effectively implemented;
- 4.3 Developing and implementing effective bio-security measures;
- 4.4 Providing the resources for additional research into pest control through integrated pest management;
- 4.5 Using integrated techniques that incorporate pest tolerant species or biological control to reduce the environmental impact of controlling agricultural and forestry pests and diseases; and
- 4.6 Co-ordinating national fire prevention and fire hazard programmes.

Main authority responsible: Agriculture Dept.

Other collaborating agencies: Forestry Dept; National Fire Authority; Min Regional Development; Fiji Sugar Corp; National Trust of Fiji; Fiji Pine Ltd.

Other co-operating parties: NLTB; Min Fijian Affairs; Dept Environment; Min Health.

5. *Research, training and education to improve land assessment and evaluation; land husbandry practices; farm and forest productivity and values; and land use planning*

5 a)

Policy objectives include:

- 5a).1 Supporting and strengthening integrated applied research into processes involved in land degradation and its prevention;
- 5a).2 Facilitating protocols in information sharing and collaborative research between government agencies and other institutions;
- 5a).3 Increasing the traditional and institutional applied research effort into developing improved land rehabilitation methods;
- 5a).4 Enhancing current participatory and rapid rural appraisal approaches that are designed to better understand social and economic factors that might impact on sustainable rural land development and management;
- 5a).5 Facilitating information transfer between researchers, extension officers, landowners, tenants and the rural community; and
- 5a).6 Determining rural sector biophysical, farming systems and agribusiness research priorities.

- Main authority responsible: Agriculture Dept; Forestry Dept.
- Other collaborating agencies: NLTB; Fiji Sugar Corp; Dept Lands and Survey; Tertiary education institutions.
- Other co-operating parties: Min Fijian Affairs; Min Education; Min Regional Development; Dept Environment; Dept Mineral Resources.

5 b)

Policy objectives include:

- 5b).1 Establishing effective ongoing extension programmes to demonstrate to farmers and land users the appropriate systems and practices for sustainable land management and increased productivity,
- 5b).2 Incorporating sound land use practice principles into information provided to landowners, tenants and decision-makers, including a best practice manual and translation into the vernacular,
- 5b).3 Promoting and monitoring the economic, social and environmental benefits of adopting sound land use practices and conservation land use systems,
- 5b).4 Establishing and providing ongoing multi-disciplinary technical advice and support to Land husbandry Groups, and
- 5b).5 Promoting the benefits of planting trees, afforestation, and developing agroforestry systems, particularly in degraded farming land, grasslands, etc.

- Main authority responsible: Agriculture Dept; Forestry Dept
- Other collaborating agencies: NLTB; Min Regional Development; Dept Environment; Min Fijian Affairs; Fiji Pine Ltd; Fiji Sugar Corp; Dept Lands and Survey; Office Prime Minister.
- Other co-operating parties: Min Education; Fiji Hardwood Corp.

5 c)

Policy objectives include:

- 5c).1 Establishing a consultative process within the rural sector to develop national priorities for agricultural and forestry research and development for the next twenty years and review each five years;
- 5c).2 Facilitating co-ordination and communication among institutions and Government agencies to ensure they work together to provide the education and training necessary to support agricultural and forestry sector;
- 5c).3 Establishing a national natural disaster risk database and improving access to resource information that re-orientates planning from after the 'event' to avoidance preparation planning;

- 5c).4 Developing a comprehensive and reliable database on the environment that will assist informed and sound decisions in the protection and sustainable management of Fiji's biophysical resources;
- 5c).5 Integrating environmental and socio-economic factors into the mainstream of decision making in the agricultural (includes forestry) sector, at all levels;
- 5c).6 Developing and implementing a sustainable land management strategy for Fiji;
- 5c).7 Assimilating appropriate advanced international experience to improve the environmental legal, policy and management system in Fiji;
- 5c).8 Reviewing and assessing current administrative policies, laws, regulations and procedures related to natural resource management, sustainable rural development and land management, and recommend appropriate changes; and
- 5c).9 Initiating with ministries, State Owned Enterprises (SOE), relevant NGO's stakeholder communities and statutory organisations having responsibilities in agriculture and land resources management, review the objective of current work programmes to ensure they satisfy sustainable development goals.

Main authority responsible: Dept Environment.

Other collaborating agencies: Min Finance and National Planning; Agriculture Dept; Min Education; Min Fijian Affairs; Forestry Dept; NLTB; Office Prime Minister; Min Regional Development; Dept Mineral Resources Department.

Other co-operating parties: Dept Lands and Survey (FLIS); Attorney-Generals Chambers

6. Institutional reform to support and enhance capabilities in all rural sector activities

Policy objectives include:

- 6.1 Developing the appropriate internal structure and placement of technical units within MAFF to support research, extension and implement sustainable land development and management programmes, this to include consideration of a potential merger of the Land Use Section and the Land and Water Resources Management Division of MAFF;
- 6.2 Establishing, where appropriate, Land Husbandry Groups to foster the community interest in land conservation and sustainable and productive land uses;
- 6.3 Initiating a review of the Land Conservation Board, its status and purpose. Then providing adequate resources to the 'new' organisation so as to provide effective implementation; and
- 6.4 Resourcing the 'new' Land Conservation Board to a level that it can effectively implement its roles and responsibilities, both legal and practical.

Main authority responsible: Min Agriculture, Sugar and Land Resettlement.

Other collaborating agencies: NLTB; Min Regional Development; Dept Lands and Survey; Min Finance and National Planning; Fiji Sugar Corp; Dept Works.

Other co-operating parties: Min Fijian Affairs; Dept Environment; Min Education; Forestry Dept.

7. Protection of water and soil values

Policy objectives include:

- 7.1 Supporting an ongoing national programme of land resource assessment, including description, mapping and monitoring of Fiji's soils and land systems;
- 7.2 Conducting a national current land use survey to complement agricultural census data and analyse trends in land use;
- 7.3 Assessing the real extent of land degradation and monitoring trends in soil erosion types in various land use systems;
- 7.4 Developing and applying practical on-farm approaches for the biological and/or mechanical control of soil erosion and amelioration of soil physical and chemical properties;
- 7.5 Co-ordinating the collation of natural resource data using geographic information system (GIS) and other tools to produce various spatial outputs in support of assessments for optional crop and land uses, planning, land development, etc;
- 7.6 Applying practical models and methodologies for soil classification, land evaluation, crop suitability and land use planning;
- 7.7 Ensuring domestic herbivores are managed to maintain and restore vegetation in an ecologically sustainable state;
- 7.8 Defining the nature and extent of land management problems (including biophysical, socio-economic factors), priorities and risks of irreversible damage;
- 7.9 Facilitating sourcing of adequate funding to undertake the research and monitoring necessary for effective water management;
- 7.10 Promoting effective integrated watershed land and water management to improve water quality and quantity in degraded catchments;
- 7.11 Establishing guidelines and standards that maintain the biophysical minimum needs of water quality and quantity; and
- 7.12 Avoiding, mitigating and remedying the impacts of land related hazards, including flooding, mass movement and soil erosion.

Main authority responsible: Min Agriculture, Sugar and Land Resettlement; Dept Works.

Other collaborating agencies: NLTB; Forestry Dept; Dept Lands and Survey; Dept Environment; Dept Town and County Planning; Min Regional Development; Dept Mineral Resources.

Other co-operating parties: Dept Mineral Resources; Min Fijian Affairs; Min Education; relevant NGO's.

8. Good governance strategies to expand and diversify sustainable economic activity, increase employment, added value earnings and promotion of social development goals

Policy objectives include:

- 8.1 Identifying niche markets for land based high value added products and developing and maintaining markets and disseminate widely market information;
- 8.2 Ensuring that natural resource-use laws do not inhibit the development of viable processing industries based on land derived products; and
- 8.3 Ensuring that harvest and added value processing technological development are integrated with training programmes and the industrial relations requirements of the sector.

Main authority responsible: Min Commerce and Investment; Dept Co-operatives.

Other collaborating agencies: Agriculture Dept; Min Finance and National Planning; Fiji Sugar Marketing Co Ltd; Agribusinesses (private sector); Min Foreign Affairs, External Trade; Min Fijian Affairs; Forest industries (Fiji Hardwood Corp, Fiji Pine Ltd, Tropik Wood Industries Ltd; and other timber processing companies); Forestry Dept; Min Tourism.

Other co-operating parties: Min Labour and Industrial Relations; National Trust of Fiji; NLTB; Min Youth and Sport; Women Dept.

9. An effective Fiji involvement with and contribution to global issues and laws related to the environment, rural development, sustainable land management, etc.

Policy objectives include:

- 9.1 Facilitating Fiji's effective participation and reporting in wide-ranging sub-regional, regional and international co-operation in the fields of environmental protection and sustainable development;
- 9.2 Implementing the conventions concerning the regional and global environment and sustainable development to which Fiji is a signatory; and
- 9.3 Strengthening the exchange of sustainable development and environmental information and expertise with the local, national, sub-regional, regional and international community.

Main authority responsible: Dept Environment; Min Finance and National Planning.

Other collaborating agencies: Min Justice; Women Dept; Agriculture Dept; Min Fijian Affairs; Forestry Dept; Min Foreign Affairs, External Trade; Office Prime Minister.

Other co-operating parties: Dept Mineral Resources; relevant NGOs; National Trust of Fiji.

5. Implementation

The outputs from this study have been a review of relevant previous studies, analysis of current legislation, identification of issues and land use practices, presentation of tools to facilitate change and a draft rural land use policy.

These should be used as a basis for debate and critique, which with revision might culminate in nationally adopted policies, strategies and action plans for sustainable development and land management in Fiji.

This document represents phase one in the process of developing a rural land use policy. Government, politicians, industry, landowners, tenants, NGOs and officials are all key stakeholders in the ensuring consultative process to develop a rural land use policy.

6. Reference

Leslie, D.M. & Ratukalou, I., 2002, Review of Rural Land Use in Fiji: Opportunities for the New Millennium. 197pp.

7. Appendices

Appendix 1 – Rural Land Use Sector Roles

Appendix 2 – Current National Strategies and Objectives

Appendix 1 – Rural Land Use Sector Roles

1. Introduction ("a mandate for action")

Fiji is a signatory to Agenda 21 (UNCED, 1992). With respect to environmental development, a Pacific Island perspective prepared for UNCED noted that "...successful implementation of environmental strategies will depend on full integration of environmental and natural resource management issues into national economic development programmes in each sector..." The document also describes the changes needed to transform agricultural extension services into environmental extension services and emphasises the importance of land use planning in improving efficiency of resource use.

The "Opportunities and Growth" strategy (NPO, 1997) stresses that "conserving the environment and promoting development are mutually dependent." It makes special reference to natural resource management and sustainable development issues "...environmental management is an integral part of the planning and development process...", that "...monitoring and management measures will be applied through all agencies dealing with land and agricultural development..." and that "...the policy for sustainable development will require ensuring that renewable resources are used in a sustainable manner".

The National Environmental Strategy (Watling and Chape, 1993) was endorsed by Cabinet. It identified the need for increased research and extension effort on issues relating to land degradation and specifically adoption of sustainable methods of sloping land agriculture. Recommendations were made for specific projects that included a national land use plan, soil conservation practices for ginger farming, resource management legislation and a terrestrial resource survey.

2. Ministry of Agriculture, Fisheries and Forests (MAFF)

MAFF has already made a commitment to sustainable development through its mission statement that reads:

"MAFF is committed to the responsible and sustainable development of Fiji's agricultural, fisheries and forestry resources, through applied research, training and dissemination of information with the aim of improving the standard of living of all people throughout Fiji."

In 1995, MAFF established a two-tiered environmental committee structure to address its environmental concerns and responsibilities. An Environmental Technical Committee prepared an Environmental Policy Paper for consideration by the Heads of Division's Committee. The environmental draft objectives and policies for the Agriculture, Forests and Administrative Divisions of MAFF are set out in Tables 1, 2 and 3 respectively. The aim of MAFF's draft environment policy is "to promote the sustainable development of Fiji's agricultural, fisheries and forest resources through direct action and joint initiatives with public authorities, the agricultural business community and agricultural producers in line with government policy and Fiji's commitment to international agreements".

2.1 Land Use Section, Research Division, MAFF

The Section has the following mission statement:

"...is committed to the implementation of the Land Conservation and Improvement Act for the sustainable development of Fiji's land and water resources and to provide quality information to clients".

The objectives in the strategic plan are twofold:

1. To ensure that the land is used according to its capabilities, and
2. To implement the provisions of the Land Conservation and Improvement Act.

MAFF's major environmental responsibilities and current laws guiding the statements are outlined in Table 4.

2.2 Forestry Department

The Mission Statement in Forestry Department's Corporate Plan (1999 – 2000) states that:

"We are committed to the effective development of the forest resources in maximising the contributions of the forest sector to our economy, and in doing so, fully recognise the need to:

- *sustainably manage the forests*
- *facilitate the development of high value export products*
- *increase Fijian forest owners' participation in all aspects of the forest industry."*

It has the overall vision to:

"Elevate the forestry sector to become the major foreign exchange earner for the country in compliance with environmentally sound and sustainable forest management practices with the support of highly motivated and professional forestry staff"

More specific accomplishments by 2001 in support of the vision are as follows:

- Forestry Department has significantly improved silvicultural and timber utilisation practices and is managing the forest resources on a sustainable basis,
- Forestry Department has developed successful awareness programmes that have increased understanding amongst all communities of the multiple functions and benefits derived from forests,
- Forest Management Information System fully operational with Forestry Department,
- Forest resource inventory systems, involving data collection, processing and reporting operates as an ongoing process within Forestry Department,
- Forest legislation (Decree, Forest Guard Regulation, Forest Regulations and Forest Amendment Regulations) reviewed, revised as appropriate and agreed to by Cabinet,
- Landowners endorse the formalised sustainable natural forest management guidelines (NLTB did this on behalf of the landowners).

Table 1: MAFF Environmental draft objectives and policies – Agriculture (MAFF, 1995)

<u>AGRICULTURE</u>			
<u>OBJECTIVE</u>			
The development and promotion of cultural and animal husbandry practices to ensure the sustainable, safe and healthy production of agricultural products.			
RESEARCH	EXTENSION	ANIMAL HEALTH & PRODUCTION	DRAINAGE AND IRRIGATION
Policy: The development of environmentally sustainable cultural practices and the provision of agricultural services which optimise resource utilisation and minimise waste.	Policy: The promotion of ecologically sustainable agricultural practices by demonstration and through provision of information, training.	Policy: The development and promotion of environmentally sustainable animal husbandry practices, pest and disease control processes which optimise resource utilisation and minimise health risk and waste.	Policy: The provision of agricultural engineering services to enhance agricultural production without depletion of ecosystem values, maintain proper land conservation systems and to minimise the impacts of flooding.

Table 2: MAFF Environmental draft objectives and policies – Forests (MAFF, 1995)

<u>FORESTS</u>			
<u>OBJECTIVE</u>			
The sustainable development of Fiji's forests such that the adverse impacts of forestry operations are minimised, representative areas of each plant community are reserved for biodiversity conservation, degraded sites are rehabilitated, and understanding and awareness of the forests and the environment are promoted and encourage.			
FORESTRY OPERATIONS	BIODIVERSITY CONSERVATION	REHABILITATION	EDUCATION
Policy: The development and regulation of guidelines for environmentally sustainable exploitation of forestry resources.	Policy: The development of monitoring and conservation systems to ensure the protection of all protected forests and reserves as biodiversity reserves, and the conservation of representative plant communities.	Policy: The rehabilitation of degraded forest areas through managed replanting of selected species.	Policy: The promotion of understanding and awareness of the Department's operations and responsibilities with respect to sustainable forestry resource management.

Table 3: MAFF Environmental draft objectives and policies – Administration (MAFF, 1995)

ADMINISTRATION			
OBJECTIVE			
The provision of agricultural support and information services in the most resource-efficient manner.			
EP&S	ADMINISTRATION	TRAINING & COMMUNICATIONS	FIJI COLLEGE OF AGRICULTURE
Policy:	Policy:	Policy:	Policy:
The development of agricultural development policies which encourage the most efficient use of Fiji's agricultural resources.	The administration of Ministerial affairs in the most resource-efficient manner.	The dissemination of information that will encourage development of sustainable agricultural practices.	The promotion of sustainable agriculture through incorporation of environmental consideration in curricular materials.

3. Native Land Trust Board

The NLTB's 3-year mission statement includes 3 of 5 elements of relevance to this study. These are to:

1. Develop working relationships with Fijian landowners and tenants thus facilitating Government's economic development plans,
2. Deliver to the Fijian landowners the best return for the use of their land for development,
3. Review laws affecting native land and policies in line with the demands and needs of our stakeholders.

NLTB has promulgated five (5) rules of operation. Many elements embodied in these rules are of relevance to rural land use policy. By rule, these are as follows:

Rule 1 (6 elements)

- Plan around Government economic development plans
- Appreciate and meet market demands for all types of land utilisation
- Where possible, develop land packages to attract investors

Rule 2 (6 elements)

- Never price native land out of the market
- Reversion of land to landless and needy Fijians must be dealt with expeditiously

Rule 4 (6 elements)

- Insist and persist on getting native land out of the strangling arms of ALTA
- Review NLTA making native land even more marketable
- Review existing policies on agricultural, residential commercial, tourism and other types of leases

Neither Rule 3 (7 elements) nor Rule 5 (5 elements) have elements of relevance to a rural land use policy.

The Forestry Department of MAFF and NLTB are the two primary institutions involved in developing indigenous forestry policy and legislation. Forestry Department's jurisdiction is prescribed by the Forest Act Cap 150 and the NLTB operates under the Native Land (Forest) Regulations. These items of legislation include provisions that control cutting and removal of forest produce, including timber.

The National Code of Logging Practice (NCOLP) and the Sustainable Indigenous Forest Management (SIFM) system prescribe the operational guidelines for cutting and removal of trees from forests. They are being field tested (at Nakavu and Drawa) preliminary to amending logging licences to incorporate the sustainable policy guidelines already approved by the Board. New logging licences will incorporate the relevant conditions on sustainable logging.

The following 5 recommendations regarding sustainable forest management were presented to the Board for approval in September 1998. It is recommended that:

1. The Board adopts the mode of medium intensity logging in its future commercial licensing of log removal from Native Land.
2. The Board only grants logging licence with a minimum term of 15 years and up to a term of 50 years of new logging licences.
3. Effective from 1 January 2000, the Board grants logging licences in conformity with the concept of sustainable logging.
4. The pre-harvest inventory is conditional on future logging licences.
5. The inclusion of the schedule on standard diameter limits table be conditional on future logging licences.

Table 4: MAFF's Environmental Responsibilities

Division	Major Responsibilities	Current Laws Guiding Statements
MAFF	Administration/policy	MAFF mission statement
EP&S	Marketing policy Protection policy	
Agriculture	Plant protection Pesticide control Land Conservation Board Soil erosion control Land use planning	Quarantine Act Pesticides Act Land Conservation and Improvement Act
Livestock	Quarantine Waste Management	Quarantine Act
Forestry	Hardwood reforestation Biodiversity conservation	Forest Decree National Code of Logging Practice Hardwood Reforestation Programme Manual Sawmill Regulations and Licence Guidelines Register of Native Forest Reserves and Protected Forests Guidelines for Dredging Drainage Act
LWRM	Land drainage and irrigation Flood protection and river training	Irrigation Act Rivers and Streams Act

Appendix 2 – Current National Strategies and Objectives

1. The Environment

The (relevant) national policy objectives for the Environment as stated in "A Strategic Plan for the New Century" (NPO, 1998) are to:

- Develop and include environmental policies into national economic planning through:
 - the adoption of environmental impact assessments,
 - the creation of a National Council of Sustainable Development, and
 - the adoption of natural resource accounting into the National Accounts.
- Strengthen the institutional capacity for sound environmental management.
- Consolidate and update environmental and resource management legislation under a single enabling and enforceable legal framework (The Sustainable Development Bill).
- Encourage traditional resource and environmental management methods.

The key performance and accountability indicators for the foregoing with the overall stated goal of 'sustainable use of natural resources' include:

- Enactment and implementation of the Sustainable Development Bill (1999),
- A natural accounts framework that takes account of natural resource depletion and environmental degradation established (2007), and
- Rate of land degradation reduced by 50% (2001).

2. Rural Development

The (relevant) policy objectives for rural development as stated (NPO, 1998) are to:

- Reduce the rate of urban immigration to sustainable levels,
- Encourage continued transformation of subsistence to commercial farming,
- Improve supply and effectiveness of credit for farming and other micro enterprises in rural areas,
- Facilitate the availability of land for commercial farming and other rural enterprise development,
- Facilitate public investment in rural infrastructure,
- Increase community participation in the planning and implementation process to ensure ownership and sustainability, and
- Attract investment in agriculture and other rural based industries.

The key performance and accountability indicators for the foregoing with the overall stated goal of "equal opportunities for all" include:

- Reduction in urban/rural income earning differential for unskilled labour,
- Increased number of persons employed in cash work in rural areas by 4% a year, and
- The area of land farmed increased to 700,000 ha (2001).

3. Sugar

The (relevant) national policy objectives for sugar as stated (NPO, 1998) are to:

- Provide sufficient security to tenant farmers and adequate regard to land owners,
- Assist the rehabilitation of the cane sector following the "Great Drought",
- Substantially lessen the incidence of cane burning and the resulting degradation,
- Communicate best practices to the whole industry, and
- Establish a Land Utilisation Board to ensure cane leases comply with "best practice" management guidelines.

The key performance and accountability indicators for the foregoing with an overall stated goal of changing the sugar from a "way of life" to "a world competitive business" include:

- Mutually satisfactory resolution to the land lease issue by 1999,
- Increasing sugar/ha efficiency from existing tonnage by 20%,
- Raising farm productivity by growing 20% more cane/ha (2005), and
- Burning reduced to 10% of crop (2001).

4. Non-sugar Agriculture

The (relevant) national policy objectives for non-sugar agriculture sector as stated (NPO, 1998) are to:

- Accelerate agricultural diversification in areas of competitive advantage (high value niche exports and traditional food crops).
- Private sector led development of the sector, with Government and other agencies playing a facilitating role. This (relevant) includes:
 - Ensuring and commercially capitalising on environmental sustainability,
 - Encouraging confirmed transformation of subsistence to commercial farming,
 - Revitalisation of agricultural research and access to technology,
 - Rationalisation and focussing extension efforts,
 - Improving supply and effectiveness of credit,
 - Support for industry organisations,
 - Attracting investment, and
 - Promoting farming as a business.
- To privatise public enterprises directly involved in the sector (e.g., NATCO).

The key performance and accountability indicators for the foregoing with an overall stated goal of achieving "sustainable rural livelihoods through efficient food security and competitive exports" include:

- Value of food imports is less than 15% of total imports,
- Two industry associations operating own extension service by 2000,
- Legislation in place to support industry ...quality standards for ginger, taro, kava and papaya (2001),
- Bilateral quarantine agreements negotiated,
- Extensive media campaign mounted on the adverse impact of burning (1999),
- Enforcement of land degradation laws,

- FDB establishes a working capital scheme for sector utilising exporters, processors and management companies (1999), and
- Privatisation of NATCO (1999), Yaqara Pastoral Company Limited (2000).

5. Land Development and Resettlement

The policy objectives as stated (NPO, 1998) below address the issue that approximately 11,800 leases issued under ALTA will expire between 1997 and 2026. The objectives are to:

- Resettle as many farmers as possible whose leases have expired and have not been renewed, and
- Facilitate agricultural diversification and intensification by making available suitable land.

The key performance and accountability indicators for the foregoing with an overall stated goal "to resettle displaced farmers who wish to continue to be involved in commercial agriculture" include:

- Resettlement 600 households (2000) and a further 2,700 households (2003), and
- 1,200ha of land developed and made available for resettlement (2000), increasing to 5,400ha (2003).

6. Forestry

The (relevant) national policy objectives for forestry sector as stated (NPO, 1998) are to:

- Manage forestry resources in a way that balances the benefits occurring to land owners and the community at large, taking into account the interests of current and future generations,
- Dedicate indigenous forest estates to be managed permanently as native forests,
- Raise the awareness of the total value and function of forests amongst stakeholders,
- Manage forestry resources in a way that takes full account of biodiversity and conservation issues,
- Develop the forestry sector to be private sector and community driven, with government playing a key regulatory and catalytic role,
- Promote the production and export of value added timber products, and
- Eliminate the culture of burning through education public awareness programmes and enforced penalties.

The key performance and accountability indicators for the foregoing with an overall stated goal of "sustainable use of forest resource taking into full consideration the interests of stakeholders" include:

- Pine product export earnings; \$60m (2000) and \$90m (2006),
- Hardwood harvest 200,000 tonnes earning \$50m (2007),
- The incidence of forest fires reduced by 50% (2000) and 80% (2003),
- National Code of Logging Practice fully implemented including silvicultural prescriptions (2000), and
- Provisions of the Sustainable Development Bill relating to forestry resources implemented.



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