Government of the Republic of Fiji Islands

United Nations Development Programme

United Nations Convention to Combat Desertification

Global Environmental Facility

# Capacity Building and Mainstreaming of Sustainable Land Management in Fiji


## Brief description

The project aims to bring about awareness and educate the nations land administrators and users on better land use management technologies through research, technology transfer, capacity building, generation and compilation of reliable data to realize and support such activities. Most of the country's developments occur on sloping lands with unsustainable practices leading to the destruction of ecosystem functionality and integrity affecting food security and sustainable farm economies thus living standard of rural population deteriorates. It will provide support for sustainable land management technologies to minimize land degradation problems; stabilize the rural community socially, economically and environmentally. It will collect, acquire and generate good quality land resources based information for sound decision making. The project will create awareness on the government's recently adopted Rural Land Use Policy and all other relevant legislations. The project is a basis for sustainable environmental, social and economic development and will address sound land management issues that will assist in mitigating land degradation problems and minimize the degradation or destruction of Fiji's land resources. As well as initiating practical on-farm sustainable land management technologies, strengthening and reinforcing institutional capability, capacity building of human resources, resource information technology development and national land use planning will be an integral part of this project. The total project cost of the SLM MSP is US$1,197,477, and consists of a GEF contribution of US$475,000 and Co-financing of US$697,477.

**Expedited Medium Size Project proposal**
**under the**
**LDC-SIDS Portfolio Project for Sustainable Land Management**
**REQUEST FOR GEF FUNDING**

**AGENCY'S PROJECT ID:** PIMS No. 3396
**GEFSEC PROJECT ID:** 3494
**COUNTRY:** FIJI
**PROJECT TITLE:** Capacity Building & Mainstreaming of Sustainable Land Management in Fiji
**GEF AGENCY:** UNDP
**OTHER EXECUTING AGENCY (IES):** Ministry of Agriculture
**DURATION:** Four (4) years
**GEF FOCAL AREA:** Land Degradation
**GEF OPERATIONAL PROGRAM:** OP 15
**GEF STRATEGIC PRIORITY: SP 1**
**ESTIMATED STARTING DATE:** January, 2008

| **FINANCING PLAN (US$)** | |
|---|---|
| **GEF PROJECT/COMPONENT** | |
| Project | 475,000 |
| PDF A | 25,000 |
| *Sub-Total GEF* | 500,000 |
| Co-financing | |
| GEF Agency | Nil |
| Government | 697,477 |
| *Sub-Total Co-financing:* | 697,477 |
| *Total Project Financing:* | 1,197,477 |
| **FINANCING FOR ASSOCIATED ACTIVITY IF ANY:** | |

**Country Eligibility:** The Republic of Fiji Islands ratified the United Nations Convention to Combat Desertification on 26 / 08 / 98 and is eligible for funding under paragraph 9(b) of the GEF Instrument

**CONTRIBUTION TO KEY INDICATORS OF THE BUSINESS PLAN:** Sustainable Land and Water Resources Management – Environmental Rehabilitation and Protection

**RECORD OF ENDORSEMENT ON BEHALF OF THE GOVERNMENT:**

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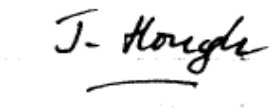
This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the GEF Project Review Criteria for a Medium-sized Project under the LDC-SIDS Targeted Portfolio Project for Sustainable Land Management.



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## ACRONYMS

| | | |
|---|---|---|
| ADP | - | Agricultural Development Project |
| ALTA | - | Agricultural Landlord and Tenant Act |
| APR | - | Annual Project Review |
| BOS | - | Bureau of Statistics |
| CBO | - | Community Based Organization |
| CO | - | Country Office |
| CSR | - | Colonial Sugar Refinery |
| DSAP | - | Development of Sustainable Agriculture in the Pacific |
| EIA | - | Environmental Impact Assessment |
| EMA | - | Environment Management Act |
| ESCAP | - | Economic and Social Commission of the Asia and the Pacific |
| EU | - | European Union |
| FAO | - | Food and Agriculture Organization |
| FSLC | - | Fiji School Leaving Certificate |
| FSC | - | Fiji Sugar Corporation |
| FSCGC | - | Fiji Sugar Cane Growers Council |
| GDP | - | Gross Domestic Product |
| GEF | - | Global Environment Facility |
| GIS | - | Geographical Information System |
| GPS | - | Global Positioning System |
| GTZ | - | German Technical Co-operation |
| HDI | - | Human Development Index |
| IA | - | Implementing Agency |
| ICM | - | Integrated Catchment Management |
| IR | - | Inception Report |
| IW | - | Inception Workshop |
| LCIA | - | Land Conservation and Improvement Act |
| LCB | - | Land Conservation Board |
| LD | - | Land Degradation |
| LDC | - | Least Developed Countries |
| LIS | - | Land Information System |
| LRPD | - | Land Resources Planning and Development |
| LWRM | - | Land and Water Resources Management |
| MDG | - | Millennium Development Goal |
| M&E | - | Monitoring and Evaluation |
| MoA | - | Ministry of Agriculture |
| MoE | - | Ministry of Environment |
| MoF | - | Ministry of Forests |
| MoF&NP | - | Ministry of Finance and National Planning |
| MoT | - | Ministry of Tourism |
| MSP | - | Medium Sized Project |
| MTR | - | Mid-Term Review |
| NAP | - | National Action Plan |
| NCB | - | National Coordinating Body |
| NCOLP | - | National Code of Logging Practice |
| NEX | - | National Execution |
| NFP | - | National Focal Point |
| NGO | - | Non-Government Organization |
| NLTA | - | Native Land Trust Act |

| | | |
|---|---|---|
| NLTB | - | Native Land Trust Board |
| NSDP | - | National Strategic Development Plan |
| ODS | - | Ozone Depleting Substances |
| OFP | - | Official Focal Point |
| OP | - | Operational Program |
| PDF-A | - | Project Development Fund |
| PIR | - | Project Implementation Review |
| POP's | - | Persistent Organic Pollutants |
| RCU | - | Regional Coordinating Unit |
| RLUP | - | Rural Land Use Policy |
| SIDS | - | Small Island Development States |
| SLM | - | Sustainable Land Management |
| SPC | - | Secretariat for the Pacific Commission |
| SPREP | - | South Pacific Regional Environmental Program |
| TCPD | - | Town and Country Planning Department |
| TPR | - | Tripartite Review |
| TTR | - | Terminal Tripartite Review |
| UNCBD | - | United Nations Convention on Bio-Diversity |
| UNCCD | - | United Nations Convention to Combat Desertification |
| UNDAF | - | United Nations Development Assistance Framework |
| UNDP | - | United Nations Development Program |
| UNFCCC | - | United Nations Framework Convention on Climate Change |
| WWF | - | World Wide Fund |

## SECTION I: ELABORATION OF THE NARRATIVE

## PART I: SITUATION ANALYSIS

## BACKGROUND AND CONTEXT

### General Context

1. The Fiji group is situated in the SW Pacific Ocean between latitudes the 15-22°S and 174-178°W longitudes. It consists of approximately 300 islands with a total land area of about 18378 $km^2$. Approximately 100 of these islands are permanently inhabited. The two main islands Viti Levu (10 544 km2) and Vanua Levu (5 535 km2) comprise some 88% of the total land area.

2. Of the total land area in Fiji approximately 51% has some form of forest cover of which 42% is native forest and the remaining 9% is exotic pine and mahogany plantations (Forestry Department Annual Report, 2005). Despite the 51% of forest cover, the extent of deforestation and its impact on the surrounding environment remains a serious concern.

3. Fiji enjoys a mild tropical climate with plentiful rain under prevailing conditions, although there are definite "hot, wet" (October-April) and "cool, dry" (May-September) seasons. Climate also differs between the windward (wet zone) and leeward (dry zone) coasts of the larger islands. Average annual rainfall for the wet zone ranges from 2 800 to 3 600 mm and for the dry zone from 1 300 to 1 600 mm.

4. On all main islands, dense tropical forest covers the wet zone whereas the drier zones have only savannah cover. Repeated burning of the grass cover has reduced some areas to bare ground (*talasiga* areas) where sub-soils are often exposed.

5. The soils of Fiji are well described elsewhere (Twyford and Wright 1965; Leslie 1997). Soils of the uplands are separated from those of the lowlands to reflect the different soil temperature regimes above and below 600m altitude. Soil temperature has a major influence on plant growth. Similarly soil moisture regimes further influence land use and crop options and are used as primary criteria for differentiating soils between the dry, wet and very wet moisture zones. Soils are further subdivided into the general type of genetic process that produced them and their resultant soil profile.

6. Young, very sandy soils from various coastal deposits are found on or near the shores of the islands. Soil of the regularly inundated coastal flats, at or near the mean tide level, fringe significant areas of the main islands and for the most part support mangrove forest marsh. Free-draining soils derived from river deposits occupy valley floors. These are generally fertile, deep and agriculturally valuable. Soils with high water tables and impeded internal drainage occupy low-lying depressions in valleys and on terraces and peneplains. Often some of the most developed soil profiles are found on near flat, stable remnants of old peneplain surfaces and very old river terraces. With the exception of recent soils derived from alluvium, Fiji soils are rated as moderately to severely erodible, especially on the slopes.

7. The population of Fiji in December 1996 was 772,655, with Fijians comprising 51.1% of the total. Indo-Fijians comprised 43.6% and the balance was made up of Rotumans, Chinese, Europeans and other Pacific Islanders. While 54% of the total population lives in rural areas, migration to the urban areas is significant and increasing. In 1986, the urban population was 39% of the total population, increasing to 46% by 1996. Almost 50% of the total increase in the urban population occurred in the Central Division. This trend in urbanization is having a major impact on agricultural land in the peri-urban zones.

8. Fiji is endowed with forest, mineral, and fish resources. The Fiji economy is heavily dependent on the success of the tourism and sugar industries. However agriculture, fisheries, forestry and gold also contribute to the export earnings of the country. The sugar industry remains the largest contributor to total domestic export earnings with sugar representing 36.7% in 1996.

9. Agriculture, including subsistence, employs an estimated 67% of the labor force. Key primary food crops produced are root crops (taro, cassava, sweet potatoes or kumala, yams) with a wide variety of fruits and vegetables. The agricultural sector of the economy accounts for almost 21 percent of GDP (FAO, 2004). Forestry is also expected to grow. However, agriculture remains the mainstay and the largest sector of Fiji's economy.

10. The forestry sector's contribution of 1.1% of GDP in 2003 is expected to increase to and some $50 million foreign exchange annually is targeted to reach the billion dollar mark by 2020. The potential for growth in this sector is bright with the commencement of mahogany harvesting. With an increase in logging, there is bound to be an increase in environmental degradation although all precautionary measures are being taken.

11. There is a significant degree of uncertainty surrounding the issue of land that has to some extent affected investment in the farm sector. There is also concern at the likely erosion of preferential access for sugar into the European market. This will mean productive, higher-cost farms are unlikely to be viable. This is also affecting the investment climate.

**Environmental context**

12. Fiji experiences the effect of land degradation. Losses of topsoil have resulted from pressure on the land particularly marginal land. While over 60% of the total land area is suited to some form of agricultural activity, only about 16% are suitable for sustained arable farming. Competition and pressure on the land is increasing due to a fast growing population. This competition and pressure on the land increases land shortage due to expansion of cash cropping and grazing on flatter lands. Size of land holdings have also declined. The small size of farm, most of which are less 3 hectares force farmers into intensive cultivation often mono cropping for high output short term production without fallow periods. In Fiji, more people have turned to the land for living and there is a problem of agricultural expansion onto marginal hilly land, which is prone to high soil erosion and subsequent soil degradation.

13. The environmental issue which is of most concern in the Ministry of Agriculture is the loss of agricultural productivity through land degradation. Most of the first class arable

land is currently being utilized. Hence all current and future agricultural expansion will be into marginal land.

14. In Fiji traditional agricultural systems have been breaking down and this has major implications for sustainable food security and people's ability to deal with disasters. Apart from soil erosion, widespread and indiscriminate burning also constitutes a disaster for Fiji. Farming on excessive slopes continues to cause serious soil erosion problems in traditional ginger/root crop areas, and on marginal sugar lands. These lands are now more vulnerable to the impact of cyclones and drought. As a consequence increasing areas of Fiji's land is becoming obsolete in agriculture

15. Soil erosion (average of 50 – 80 tonnes/hectare/year) has already reached a level where it surpasses the acceptable soil loss rate in the tropics of 13.5 tonnes/ha/year. Results from on-farm Agroforestry research in Lomaivuna and Pacificland Network research in Waibau for example, indicate that the use of hedgerows as sustainable land management practice for sloping lands have directly trapped up to 86 tonnes of soil per hectare per year, while the watershed management and flood control study by JICA estimated 32.2, 69.0, 76.9, & 81.4 tons/hectare/year of soil loss in the Rewa, Ba, Sigatoka and Nadi watersheds respectively.

16. Research findings reveal that 40gm of urea, 3gm of super phosphate and 11gm of muriate of potash are released in the soil from each kilogram of mulched calliandra leaves. These leaves will also provide a source of supplementary fodder for ruminants while the hedgerows will act as a windbreaker. Vetiver grass has proved to be a low cost technology to protect billions of dollars of investment in agriculture, forestry etc. While the pineapple barriers, will provide additional source of income to the farmers.

17. Therefore if all the available low cost sustainable land management technologies are practiced a substantial decrease in the current average erosion rate of 50 - 80 t/ha/yr is anticipated. This will save, soil loss, valued around $7.57 - $22.72/ton per year in the ginger growing areas (NEMP, Report 14). While ADB consultant, Clarke in 1989, estimated the cost of conservation works in Rewa and Ba watersheds to be over $18m.

18. The Ministry alone spends over $4m annually on dredging works. Since prevention is better than cure, it would be wise to invest in control measures in the water catchment areas to minimise soil erosion. The project will reduce the volume of dredging and de-silting works required on an annual increment of almost 5%.

19. With an ambitious target of billion dollars in foreign exchange by 2020, there is bound to be increased logging. The forestry sector needs to promote reforestation, afforestation and sustainable forest management programmes. Otherwise, the destruction of Fiji's biodiversity, will increase adverse micro-climatic conditions that impact on the resource base affecting livelihoods of rural people.

**Socio-economic context**

20. The present trend in land use in Fiji is already having a negative impact on the socio-economic and external trade situation of the country. If this trend continues it will lead to disastrous effects. For example land degradation and desertification will occur to such as an extent which will make large parcels of land unproductive and rehabilitation costs extremely high. The net effect will reduce food security, increase poverty and our foreign trade drastically marginalised. Depletion of Fiji's natural resources is occurring at an alarming rate and if land users continue to ignore the use of soil conservation methods, the ability of agriculture to provide the nation with basic food requirements will be unsustainable

21. Fijians live and rely on mainly rural subsistence economy. Due to the relatively small size of farms and topographical harshness, any disturbances to the land can impact on the livelihood of families and communities. With the increase in need for cash by the rural communities, more land are now in demand for development and the only option is the uplands which a re highly susceptible to erosion. Majority Fiji's population still live in the rural areas, however there has been an in increase in urban migration, driven by employment prospects, problem of access to rural land, limited income generating opportunities and poor services and infrastructure in the rural areas.

22. Increase in population pressure on the land reduces land holdings which has been a major cause of rise in poverty among farm operators. Increase in poverty and small land holdings has an major influence in the sustainable management of land resources, where poverty stricken farmers cannot adopt improved farming technology or conservation practices because they lack the economic resources and do not possess requisite human skills to implement such programs. As populations increase, greater numbers of people are forced to cultivate marginal farm land which acerbates soil loss.

23. Poverty can be seen in all communities. Although the impact of poverty is offset by the relatively high level of subsistence and food security, 25 per cent of the population is living below the poverty line. This proportion has probably increased as a result of the impact on land use from the recent droughts, floods and subsequent displacement of farmers from the sugar industry. Evidence of this is found in the growing number of families receiving family assistance benefits from the government. 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. Rural poverty is greatest among those farming degraded and/or marginal land for agriculture and among those without access to the land. The significant increase in rural-to-urban migration has reduced the food security buffer and traditional (rural) family support mechanisms.

24. Rural youth constitute a major part of the less educated school leavers (without FSLC) and are a significant element in the rural-to-urban migration due in part to the lack of employment in the rural sector. No significant Government schemes are available to create rural employment and stimulate income-generating opportunities.

25. UNDP's Human Development Index for Fiji in 2004 ranked 81 out of 175 and was classified as medium. Human Development Index (HDI) is widely accepted as a measure

of a country's progress in attaining satisfactory levels of education, health and income and this has dropped in recent years.

**Policy, institutional and legal context**

26. Fiji has a number of legislation which deals with various aspects of land resource planning and management. Majority of these were enacted during the Colonial era and need revising to suit the present development conditions. Sustainable land and water resources management has been on the government's policy for years now but the commitment to provide the required resources has not been forthcoming. The government's National Strategic Development Plan has policies that are consistent with the Millennium Development Goals (MDG's). Deforestation, soil erosion and other land degradation issues are being addressed through various programmes in partnership with NGO's on a very small scale.

27. Fiji continues to implement its obligations under various international environmental and resource conventions that it has ratified. In this regard there are a number of policies such as the Rural Land Use Policy, Forestry Policy, Tourism Development Policy and the Urban Planning Policy are being revised including key elements such as reducing poverty, ensuring food and income security, ensuring sound land development, utilization and management, minimizing the degradation of the natural resources and the protection of biodiversity, awareness on importance of sustainable development, promotion of strategic partnerships, harmonize legislations with principles and provisions of relevant conventions, protection, preservation and management of Fiji's cultural heritage, disaster mitigation and vulnerability reduction, accelerate agricultural diversification, ensuring security of land tenure, improving access to reliable information and human resources development.

28. A recent study, The Review of Watershed Management Legislations (Clark, 1986) is the most comprehensive critique of legislations relating to subdivision of lands and the conservation and management of land and water resources. Of primary relevance to rural land uses were the following legislations:- Land Conservation & Improvement Act,

- Rivers & Streams Act,
- Drainage Act,
- Irrigation Act,
- Subdivision of Lands Act,
- Agricultural Landlord & Tenant Act,
- Native Land Trust Act,
- Land Development Act,
- Forest Act,
- Mining Act,
- National Trust Act and
- Environment Management Act.

29. The recently enacted Environment Management Act (2005) was adopted to address Fiji's environmental problems. Although Fiji now has an Environment Ministry, it remains to be seen if they are not adequately staffed and equipped to enforce its provisions.

30. The Land Conservation and Improvement Act (LCIA) which has been there since 1953 is probably the best legislation to address land degradation. It establishes the Land Conservation Board (LCB) which has powers to exercise general supervision for the conservation of land and water resources of Fiji. This is under the jurisdiction of the Minister for Agriculture. Fiji is in the process of reviewing and revising or amending the Act to accommodate present day needs and obligations to environmental conventions and agreements. It is envisaged to include a wider stakeholder representation as well.

31. While the Rivers and Streams Act, 1882 defines the public rights to streams and rivers, the Drainage Act provides for mechanisms for implementing and rehabilitating public drainage works. The beneficial impact is on the amelioration of flooding and improved drainage downstream do not provide an appropriate means for controlling land degradation. The Irrigation Act (1974) is there to facilitate the development of irrigation schemes and contains sufficient powers to ensure that proper land conservation measures are applied.

32. Apart from the above, land tenure and land use issues are also addressed in the Native Lands Trust Act (NLTA) which relates to the Control and Administration of Native Land. The Agricultural Landlord and Tenant Act (ALTA) provides for the relations between landlords and tenants of agricultural holdings and all matters connected to it. The leasing and tenancy or license conditions of both are very similar in nature although ALTA provides for security of tenure and recourse to be dealt by an independent tribunal. Provisions that ensure that tenants can recoup the cost of agreed capital improvements are complimentary to security of tenure and could prove critical in the context of soil conservation and sustainable land management.

33. The Forestry Act deals with the management and utilization of the forest resources. When a commercial operator is permitted to carry out logging activities with a leased area, the approval of both the Conservator of Forests and NLTB is required. Specific requirements may be attached to the permission and Forestry field officers assess forests for cutting, inspect operations and scale logs. The officers could also exercise close supervision over the deterioration activities of the loggers. The National Code of Logging Practice (COLP) is in place to provide standards for loggers. While it guarantees an environmentally friendly operation, it in itself does not sustain the forests.

34. Some policies relevant to land degradation in Fiji's various sectors as stated in the national strategic development plan are as follows:-

**GOVERNMENT VISION:** ***Prosperity for All***

Government firmly believes that we must protect the environment so that our children may also enjoy the benefits of our natural resources.

**GOVERNMENT MISSION:** ***Develop and implement the best political, social and economic policies.***

International commitments with consistent and credible policies.

**GUIDING PRINCIPLES:** Environmental Sustainability.

Poverty Alleviation.

**CROSS-SECTORAL - LAND RESOURCE DEVELOPMENT & MANAGEMENT**

| ***Goal : Effective management of land resources to ensure sustainable development*** | |
|---|---|
| ***Policy Objectives*** | *To ensure sound land management and development*<br>*To ensure security of land tenure*<br>*To improve landowner's accessibility to credit.*<br>*To ensure sustainable utilization and development of land.*<br>*To develop friendly land use model under the framework of the Native Land Trust Act* |
| **CROSS-SECTORAL – ENVIRONMENT** | |
| ***Goal: Sustainable Use of All Natural Resources.*** | |
| ***Policy Objectives*** | *To minimize degradation of natural resources and protect biodiversity*.<br>*To raise awareness of the importance of sustainable development.* |
| **SUGAR SECTOR** | |
| ***Goal: Producing High Quality Sugar for the World Market.*** | |
| ***Policy Objective*** | *To increase the efficiency, productivity and quality of sugar cane production in farms.*<br>*To diversify the range and production of sugar by-products.* |
| **NON-SUGAR and LIVESTOCK SECTOR** | |
| ***Goal: Sustainable Community Livelihoods Through Competitive Exports and Efficient Food Security*** | |
| ***Policy Objective*** | *To ensure sustainable development in non-sugar agriculture.*<br>*To promote food security.*<br>*To accelerate agricultural diversification into areas of competitive advantage.* |
| **FORESTRY** | |
| ***Goal : Sustainable management and development of forest resources.*** | |
| ***Policy Objectives*** | *To provide the appropriate institutional and physical infrastructure to support the development of the sector.*<br>*To ensure sustainable development and management of forest resources.* |

## Causes of Land Degradation

35. Land degradation can be broadly defined as any form of deterioration of the natural potential of the land, which affects ecosystems and people's livelihoods. The causes of land degradation can be attributed to changing weather patterns, increasing human populations, over exploitation of the natural resources, bad land husbandry/use practices and other interactions between socio-economic and biophysical processes.

36. **In Fiji the rapid decline in areas of natural forests, unsustainable farming and logging are the root causes of land degradation.** This is associated with increases in runoff and sedimentation and threatens coastal lagoons and marine ecosystems. Overexploitation of forest for timber and clearance for agricultural purposes followed by land clearance also causes deforestation. Forest fire and poor logging practices also affects the ability of forests to regenerate.

## ROOT CAUSES

### *Deforestation*

37. Deforestation has slowed but it is continuing under a more controlled regime despite introduction of the National Code of Logging Practice. In the 1960s, up to 140,000 ha of Fiji's forests were converted to non-forest land use with loss of forest cover leading to serious soil degradation. This was particularly so where logged areas had no subsequent management. Here the incidence of mass movement and soil erosion is high. In many cases, forest logging practices have caused avoidable environmental damage (the National Code of Logging Practice has been adopted – but its enforcement is often inadequate).

38. There are six principle causes of deforestation in Fiji:

- clearing of forest associated with a large-scale commercial (agriculture) rural development project;
- the continuing small but steady growth of smallholder agriculture involving mixed commercial and subsistence farming;
- the continuing spread of small villages and settlements;
- urban growth and infrastructure to service these areas (road, dams, bridges, reservoir);
- fire; and
- bad logging practices followed by land clearance.

39. Ecologists have concerns over the forest hardwood programme. These relate to the vigour of mahogany that potentially could lead to a monoculture and elsewhere, invasion of native forests. Also, as mahogany plantings often follow logging, a high proportion of Fiji's native production forest is being lost. Planting of mahogany on steep slopes and riparian zones (which is illegal) poses a potential erosion risk at logging time.

### *Unsustainable Logging*

40. Unsustainable logging practice is the clear felling of the forest trees and vegetation followed by burning, all in the guise of rural development. The over exploitation of forest for timber is also a factor of deforestation. Logging itself does not necessarily permanently reduce forest cover. Poor logging practices however can and do affect the ability of forest to regenerate. Heavy disturbance of forests is still occurring and this type

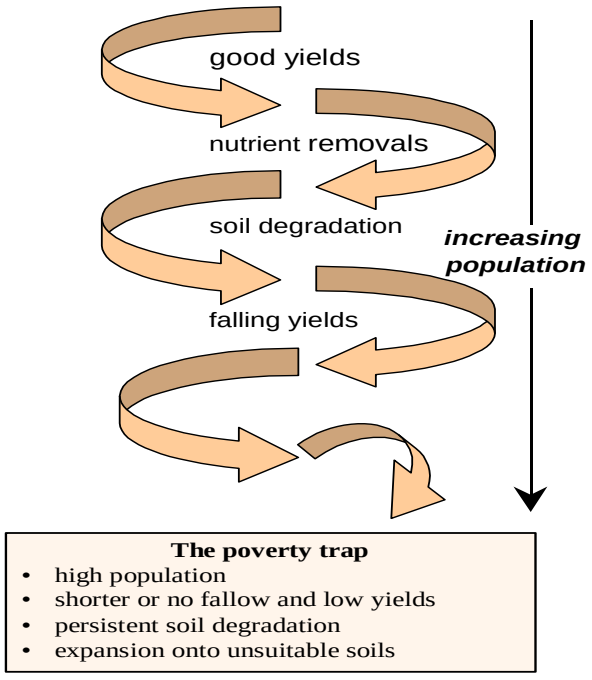
tends to encourage clearance for agricultural purposes. More dense forests are under less stress. The unplanned alignments of logging roads have on-site and off-site consequences to the environment such as erosion on road embankments, which causes siltation of creeks and depletion of biodiversity in the river ecosystems. These practices, both within and outside logging concession areas have significantly affected forest quality and biodiversity to the detriment of both forest cover (through erosion) and subsequently, forest-based industries.

***Intensive sloping land cultivation***

41. Increased population, low availability of fertile arable land and the encroachment onto fertile arable land for non-agricultural purposes such as urban expansion, has forced farmers to use sloping marginal steep land.

42. Intensified use of marginal steep land areas leads to shorter fallow periods and ultimately to soil degradation and reduced crop yields from those crops such as sugar cane, ginger and *dalo* grown on sloping land with crops planted up and down slopes (rather than across the slope). This induces on-site land degradation, soil erosion, loss of plant nutrients, increased pest and disease infestation, reduction in soil depth, decreased soil water-holding capacity and rill and gully erosion. This gives rise to an unsustainable cropping system that ultimately leads to poverty (Figure1). Off-site effects include increased siltation in the river systems, formation of mud banks, reduced navigability of rivers, and destruction of fish spawning areas, reduced fish populations and flash floods during heavy rains. The latter causes damage to infrastructure costing millions of dollars in rehabilitation, sometimes loss of life and increasing destruction of coral reefs.

*Figure 1: The downward spiral to the poverty trap*
*(From: Cherish the Earth, FAO, 1994)*



***Intensive flat land cultivation***

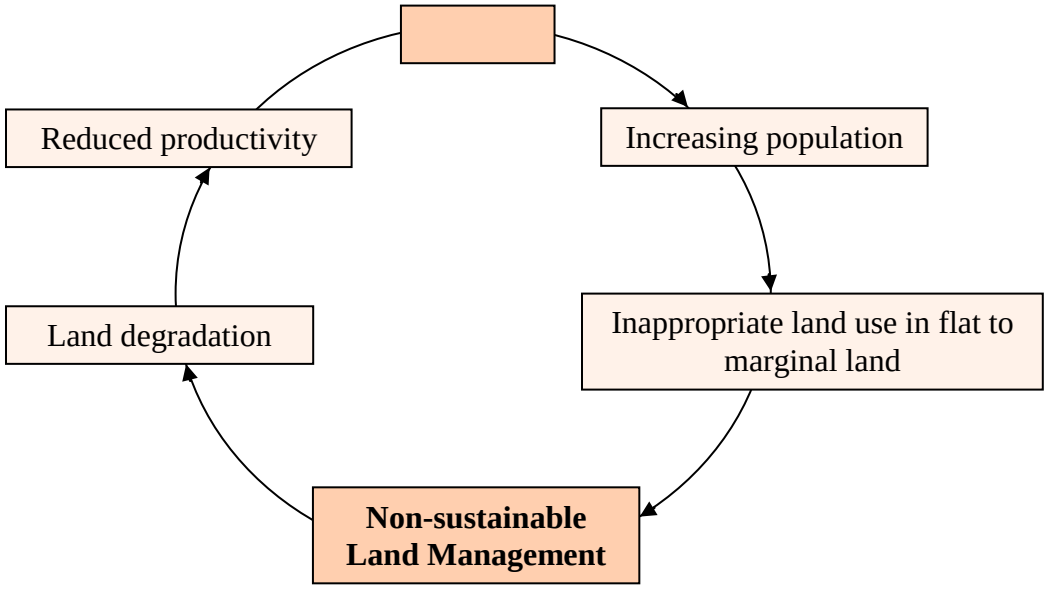
43. Commercial and intensive farming on flat land often includes total clearing of forest and land for mono-cropping. It is the concentration of high-production output on a short-term basis, without consideration for the soil resources or 'best practice' farming, which results in unsustainable use.

The large-scale intensive and continuous cropping with crops like sugar cane, *dalo*, maize, ginger and others on flatland depletes the soil of plant nutrients and increases the dependence on expensive fertilisers. During heavy rainfall, the leaching and overland flow of the fertilisers and farm chemicals into rivers and ground water causes water pollution. As for sugar cane, the burning of trash after harvesting destroys micro-organisms and the organic matter on the soil surface. Tractors can cause compaction of the soil and an increase in bulk density that results in poor crop growth and low infiltration rates during heavy rain. Compaction is also an issue associated with logging operations.

44. The consequences of these practices result in a reduction in farm income that in turn can lead to the beginning of the cycle of poverty (Figure 2).

*Figure 2: The vicious cycle of land degradation*

*(From: The Conservation of Lands in Asia and the Pacific, FAO, 1992)*




**OTHER CAUSES**

***Commercial livestock farming***

45. The commercialization of livestock farming without good pasture management, with unfenced paddocks and overstocking, leads to a situation where the land and animal feed is out of balance or the carrying capacity of the pasture is low. This results in soil erosion on steep marginal areas. Land degradation compounds when mature grass cover is burnt repeatedly to create young grass shoots that are palatable for livestock. Burning is usually

done just before the onset of the wet season, therefore causing soil losses and mass movement. Another major problem is the accumulation of tonnes of animal waste that usually finds its way into streams and rivers causing pollution of waterways.

***Burning***

46. Mission grass areas are burnt each season. The grass 'browns off' early and when fired at late growth stage; the entire cover is lost due to total combustion and extremely hot fires. This results in a high percentage of bare ground (mission grass dominates, with other species smothered) and exposure to rainfall impact. There is a widespread culture of burning and a growing incidence of wild fires in the indigenous forests and pine plantations.

***Ad Hoc Urban development***

47. Increase in population and the continuous influx from rural to urban areas have resulted in significant urban development and encroachment onto first-class arable land. The following are some examples of the land use practices that degrade the land in one way or other:-.

***A. Hotels***

In the quest for more earnings from tourism, Fiji has to regulate the type of hotel development best suited for particular ecosystems. Reclamation of entire mangrove islands also impacts adversely on nearby areas used as a source of landfill material.

***B. Housing***

Siting of housing schemes are a source of irritation nowadays since earthmoving and leveling operations tend to overload waterways with all forms of debris. Eventually such debris finds its way to the coast and upsets the ecosystems.

***C. Highways and roads***

Recent work on highways and roads demonstrate scant regard for measures to divert water safely into areas that are environmentally safe and stabilizing road embankments through 'greening' programmes is commonly ignored.

**BARRIERS / CONSTRAINTS TO SLM**

***Demographic changes***

48. Although there has been an absolute decline in the rural population over the last decade due to the rural to urban migration; the majority (54%) of the population still lives in rural areas. The uneven distribution of arable land has resulted in some localized demographic imbalances. The amount of unused land suitable for development is quite small and land use competition is becoming increasingly intense, impacting on the production capacity of Fiji's natural resources.

***Pressure on the production base***

49. The conversion from subsistence to commercial agriculture, and the inferior quality of each parcel of land brought into use have meant that the average new rural family requires more land than their predecessors did. The small size of farm holdings (60% are less than 3 ha) forces farmers into intensive cultivation (often mono-cropping) for high-output, short-term production without or with only minimal fallow periods and /or virtually no attention to sustainability..

50. Because of competition and pressure for land, subsistence gardens are increasingly being relocated onto steeper slopes because of the expansion of cash cropping and grazing on the flatter lands. Some gardens experience soil loss, especially when traditional mulching is not practised and fallow periods are too short.

51. Soil loss measurements clearly demonstrate that the agricultural productive base in many sugar cane areas, and with ginger on slopes, is declining at a rate that is well above what would be regarded as economically acceptable.

***Inappropriate land use in watersheds***

52. Erosion resulting from inappropriate land use and land management practices in watersheds has led to progressive siltation of rivers resulting in deterioration of drainage on floodplains, frequent inundation and the formation of shallow bars across the river mouths. Dredging of rivers has become a very costly necessity. Land degradation in watersheds causes peak flows in rivers during high-intensity storms. This results in downstream sedimentation and flooding with serious implications for settlements, domestic water supplies, infrastructure (roads, bridges) and crops. There is general lack of attention by loggers to erosion, stream flow and ecological considerations; similarly to legally established reserve forest areas.

***Over-dependence on the sugar industry***

53. The country's high dependence on the sugar industry and its quota and incentive system encourage cane farmers to move onto slopes greater than 11º and, commonly, to not practice any soil conservation measures. Over a short period of time, many of these areas experience soil depletion, soil moisture deficits and decreasing productivity. Where land degradation has become extreme, farmers are forced into growing non-cane crops or foregoing leases.

54. Overall the sugar industry is experiencing declining productivity and industry efficiency (FSC Annual Research Reports). Sugar prices have declined, there is little new investment into the sector, there are growing uncertainties about land tenure and there is a high level of farmer indebtedness. There is a prevalent attitude that a soil's only function is to physically support the cane crop – all nutrient inputs are artificial – and there is scant regard for the soil's role as a 'bank' for moisture and nutrients. FSC (apart from recent Taiwanese assistance) has long ceased research into soil conservation. This is in a situation where estimates point to 15,000 ha of cane land on Viti Levu being in urgent need of soil conservation works and a further 6500 ha that should not be in cane at all.

55 The burning of cane trash, while illegal, is a widespread practice and over repeated years, combined with long fallows every four to five years, results in serious depletion of fertility and soil loss. Trash is burnt, and then follows a period where the soil surface is bare and exposed to high-intensity rainfall. This period coincides with the wet season and on sloping land commonly results in severe sheet erosion.

***Adoption of appropriate SLM technologies***

56. The use of vetiver grass planted along the contour in the cane belt was a widely promoted practice until 30 years ago. The Fiji model for the use of vetiver grass is described widely in world soil conservation literature; unfortunately, this is no longer the case with only a

fraction of vetiver grass areas remaining. It is a proven technique to control soil movement and loss on sloping land.

57. Pressures on land indicate an urgency to increase sustainable production per unit area. However, there is poor understanding throughout the agriculture sector about a much closer matching between land use/crop type and land capability if productivity goals are to be met. There is very low farmer participation in technology generation.

58. Because of the predominantly poor adoption and application of land husbandry practices and the resultant degradation of the land and water resources, the impact of natural disasters is becoming increasingly more acute, in particular, vulnerability to droughts and flooding.

59. The level and standards of technology transfer from officials to farmers is inadequate on matters of land use diversification and intensification, farming systems and their development needs, new systems, costs of inputs and gross margins, post-harvest support and marketing.

***Weak institutional infrastructure***

60. Land conservation is generally ineffective because there is no strong executive authority in a coordinating role, nor is there close integration between Government departments and other stakeholders, and there is an absence of any strong political will. The current land-use management administrative and institutional framework is highly sectoralised, promoting unsustainable resource use and inter-ministerial frictions. Prior to Fiji's independence, CSR and MAFF had some 60 conservation officers between them, but today there are none and expertise in the areas of agricultural extension, soil conservation, land use and environmental planning, management and enforcement is below critical mass in the responsible line ministries.

61 The primary responsibility of the LCB an enormous national task the 'overall supervision over land and water resources of Fiji' (as per the Land Conservation and Improvement Act, 1953) yet the Land Conservation Board (LCB) has no public profile and has no resources of its own. The Land Conservation Board is not acting on the powers vested in it and while the Board has 'ownership' of the problems and solutions there is minimal government support and intervention for the Board to fully implement its 'powers to exercise general supervision over land and water resources'. The Board is in urgent need of revitalization, concurrent with a national awareness programme on environment management policies and legislations. Advice and field inspections relating to the land husbandry clauses in NLTB and ALTA leases are left neglected. As a consequence, NLTB and Land's Department hardly exercise their legal rights with respect to bad land husbandry practices.

62. Environmental issues are not well addressed in the planning process. Although the Environmental Management Act exists there are no objective guidelines set for environment impact assessments on national level planning. There is a poor awareness or scant disregard 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. It is therefore

difficult for TCPD to consider or action environmental needs. The absence of is a National Land Use Plan is a major constraint for sound decisions in resource allocation and management particularly in the rural sector. The Rural Land Use Policy for Fiji, it now needs to be absorbed into sectoral policies and the review of legislations.

63. Currently there is an over-centralisation in planning and current legislation does not allow for segregation of national, divisional and local issues. Desirable outcomes from national, divisional and local land use and rural sector development objectives cannot be realised without the following mechanisms:

- 'Bottom–up' planning;
- A change in the current national centralisation of control;
- Introduction of legislation that segregates natural, divisional and local issues;
- Integration of land capability and community needs; and
- The absence of law and processes for co-ordination of watershed management, land zoning, land use planning and sustainable natural resource management

***Information***

64. There is a very poor public understanding in the rural sector about various legislation that pertains to land, land use practice and soil conservation. This situation results in part from the fact that the majority of government and corporate (e.g. NLTB, FSC) field officers responsible are themselves not conversant with the various laws. Also, there have been no public awareness programmes to inform about the land husbandry provisions stated in these laws and written into rural leases. For 30 years, there has been in essence no enforcement or policing of these provisions; in effect, a whole generation has been kept in the dark since land conservation laws were regarded seriously and enforced.

65. Soil conservation legislation is not being used due to poor understanding of the issues at both planning and implementation levels. Resources devoted to soil conservation are inadequate for applying significant measures either for information or incentives. The LCB does not have available information and publicity material for land users/farmers about soil and water conservation and land management.

66. There is a lack of clear guidelines on what constitutes 'bad' land husbandry practices, and poor institutional understanding about the magnitude of the soil erosion problem. There is also very little literature about land use farming practices available in Fiji Hindi or Fijian.

***Land Tenure***

67. The availability of land resources for agriculture and other commercial activities is an important ingredient for the socio-economic development and diversification of the economic base of a country. The total land area of Fiji is 18,299sq km ( refer to Table1) comprising of the following; native land for those lands owned by traditional land owning units which may be mataqali, tokatoka or yavusa; Rotuman communal land State land or formerly crown and freehold land.

*Table:1 ; Types of Land Tenure ( Ownership) in Fiji*

| Tenure Type | Areas | Percent of Total Area |
|---|---|---|
| State Land | 31,195.0 hectares | 1.70 |
| Freehold Land | 147,448.0 hectares | 8.06 |
| Native Land | 1,646,814.0 hectares | 90.0 |
| Rotuman Communal Land | 4,452.0hectares | 0.24 |
| Total | 1,829,909.0 hectares | 100% |

68. The land tenure system and leases issued under the native and crown land through the Agriculture Landlord's Tenants Act is not conducive to the sustainable land resources management, where the lessees tend to mine the land for economic gains, knowing very well that the lease will expire after 30 years of occupation, therefore resulting in high degree of land degradation. . The land tenure system and leases issued in the native and crown lands through the Agriculture Landlord & Tenants Act (ALTA) is conducive to the sustainable land resources management but not monitored and supervised on the mismanagement or non compliance by the lessees who sometimes tend to mine the land for economic gains, knowing very well that the lease will expire after 30 years of occupation which results in a high degree of land degradation.

69. A total of 13,141 leases will expire by 2028 and some will be renewed to sitting tenants and the rest will be occupied by the landowners and new tenants. But this leasing arrangements needs to be reviewed to take into consideration the need to extend the length of the tenancy. This will give the tenants confidence to invest on the sustainable development and management of the land to sustain crop production and other forms of land use.

***Poverty and unemployment***

70. The proportion of households living in poverty increased from 15% in 1983 to 25% in 1991 (UNDP, 1996). It is estimated that the proportion of households living in poverty has further increased since the political and economic instabilities of May 2000 and December 2007. Income poverty and financial hardship are perceived to be increasing in Fiji.

71. A 1997 United National Development Programme (UNDP) study showed the number of people living in poverty (live on less than US$1 a day) at about 25.5 per cent of Fiji's population in 1990-1991. A regional survey conducted by the Economic and Social Commission for Asia and the Pacific (ESCAP) in 2004 confirmed this level of poverty and concluded this phenomenon was probably the result of two factors. Firstly, it is a sign that the communal village system is now able to support the increasing population and is not providing the kinds of goods and services available in the urban areas. Secondly, the low level of investment and job growth is leaving many urban migrants without work and income. There are about 80,000 people now living in squatter settlements in Suva. ESCAP say the "worsening blight of poverty shows what government policies and actions are needed."

72. The UNDP study showed that Fiji is no longer a country of self-employed, self-sufficient farmers; and that the assumptions that subsistence provides for a significant part of household income and that people grow or collect most of their own food, is now untrue in many cases. At present people are still able to garden and fish for at least some of their food although a growing number have no land or permission to use it.

73. The project will have a primary focus of developing solutions to poverty and malnutrition, poor living conditions and competition for resources in remote and isolated villages of rural Fiji. The key to addressing the problems in these areas will be higher sustained production from the existing land resources which will result in food for increased populations, avoidance of conflict due to shortfalls in basic needs, higher living standards and improved living environments, and surplus income for education, health services, and other infrastructure.

## PART II: PROJECT STRATEGY

## PROJECT DESCRIPTION

### Baseline course of action

74. Even though Fiji had ratified the UNCCD in 1998 its first draft of the National Action Program (NAP) was only submitted in 2006. Several multilateral, bilateral and nationally funded scientific and technical activities or initiatives are being undertaken to create synergies in the formulation and implementation of the NAP. But these initiatives and activities can only be successful through financial and technical support by the national government and international partners.

75. Since then there has been changes in the national focal point (NFP) and the Global Environmental Facility (GEF) operational and political focal points. The finalization of NAP and the National Strategic Development Planning process for Fiji is being done simultaneously to maximize mainstreaming by stakeholders. The national reporting has been based on the National Strategic Development Plan (NSDP) as well. The Plan is a manifestation of policies and strategies assembled together by the Government through participatory dialogue and consultations with relevant private sectors and civil societies in the country. Providing a holistic approach on the key economic, social, environment and political fundamentals that are required by any Government to safeguard and promote.

76. There are very few projects that are currently addressing the issue of addressing land degradation and strengthening of existing capacities at various levels through innovative means. One such project is the Development of Sustainable Agriculture (DSAP) a regional project being implemented in 10 Pacific Island Countries. The project is funded by the European Union and its main purpose is to increase sustainable agricultural production on farm families in participating countries. The main strategy for achieving this emphasis is the dissemination of technologies based on the farmer livelihood needs and building national institutional capacity in the use of participatory approaches in sustainable agriculture developments.

77 The Land Use Section of LRPD, the Research and Extension Division of MoA, other Ministries, NGOs and civil society such as the Foundation of the People of the South Pacific, University of the South Pacific, WWF and others have jointly carried out awareness and training on land degradation, disseminating information on sustainable development and transferring of low cost sustainable land management technologies for sloping land farmers as well as for the school children and other stakeholders through the government funded Sustainable Land Management Project. The long-term vision is to set up land husbandry/care groups in various communities in Fiji to empower communities to oversee the sustainable development and management of their natural resources.

78. Fiji does not have an integrated rural land use policy or a national land use plan to ensure wise resource allocation and management in the rural sector. It is of critical importance to have one to cover all land based resources such as forest, agriculture, minerals, rivers and streams. The current administrative and institutional framework responsible for the resources allocation and management is highly sectoralised. The Environment Management Act and the National Environment Council is currently addressing some aspects of this but is in its infancy.

79. With the assistance of the South Pacific Community/ Pacific German (GTZ) Forestry/Agroforestry Program a review on the rural land use in Fiji began in 1998. This resulted in the formulation of a coherent set of National Rural Land Use Policies which was endorsed by government in 2005. The National Rural Land Use Policies are being adopted into sectoral policies and planning frameworks.

**Capacity and mainstreaming needs for SLM**

80 Land conservation is generally ineffective because there is no strong executive authority in a coordinating role, nor is there close integration between Government departments and other stakeholders, and there is an absence of any strong political will. There is in general an inability by the Government of Fiji to manage natural resources on a sustainable basis due to inadequate budgetary provisions for policies, legislation, forward planning and administration. No one government department is responsible for the planning and co-ordination of watershed management.

81. Training and human resource development is needed in several key areas. This includes training in the management of land information systems, GIS, GPS, Remote Sensing etc, especially for senior officers in government planning bodies. Training on participatory, integrated land use planning and management is a particular need in Fiji. Training on sustainable agricultural practices is needed for agricultural extension staff, NGOs and CBOs representing local resource users. Training is needed for government planners in the integration of LIS and SLM guidelines into planning at the local and national levels. Training in the application of environmental/natural resource economics to the analysis of existing land use systems and in the identification of economically and financially viable land management alternatives is needed in government planning bodies and at the university level.

82. There is a need to create awareness since it has been seen that there is very poor public understanding in the rural sector about various legislations that pertains to land, land use

practice and soil conservation. This situation results in part from the fact that the majority of government and corporate (e.g. NLTB, FSC) field officers responsible are themselves not conversant with the various laws. Also, there have been no public awareness programmes to inform about the land husbandry provisions stated in these laws and written into rural leases. For 30 years, there has been in essence no enforcement or policing of these provisions; in effect, a whole generation has been kept in the dark since land conservation laws were regarded seriously and enforced. Tenants farm under uncertainty with a very short-term perspective and show little interest in sustainable land use practices. Furthermore, the legislation is not properly enforced so the tenant is not compelled to practice good husbandry and soil degradation continues

83. Despite growing community and government recognition of the problem of land degradation in Fiji, sustainable land management (SLM) objectives have not been mainstreamed into policies, regulations, strategies, plans, educational systems, and the budgetary system, etc. There is no general recognition on the part of planners, developers, politicians and decision makers that LD is a significant barrier to sustained economic development. Environment/natural resource economics need to be developed as tools for land use planning and policy development. This should include cost/benefit analyses of present land use systems – the cost of doing nothing – in comparison with similar analyses of SLM option. SLM needs to be integrated into the National Forestry Policy, Water Policy, Tourism Development, Urban Planning and the Agricultural Policy which is not there at all. Other policies and regulations for SLM will need to be developed as appropriate as the SLM knowledge base is developed.

84. Fiji needs to develop a knowledge management system for SLM. The knowledge management system should include social, economic and financial analyses of the present land use trends and systems and the use of these tools for identifying/developing new systems that are viable as needed. Best practices and lessons learned need to be synthesized and diffused. A status report of land degradation/SLM should be developed for all localities. Land owners/natural resource users needs to be made aware of these results. Authorities and decision-makers need to identify key policy options and ensure its mainstreaming. Capacities for identifying and promoting sustainable, economically/financially viable land use options alternative to sugar cane agriculture need to be developed. Land information systems need to be further developed and used for the challenges of identifying sustainable land management systems, for planning SLM development, for monitoring the sustainability of land uses and for monitoring SLM and the application of SLM laws/legislation. A key need is the development of a National Land Use Inventory on all sectoral land uses and developments. Information systems need to integrate data on condition of land/resources and impact through various uses and other information needed for land/resource management. Harmonization of LIS systems needs to be developed identifying overlaps to avoid unnecessary duplication; and identification of key information gaps and of measures to fill the gaps.

**Project rationale and objective**

85. This project will contribute towards the long term goal of minimizing land degradation and improving agricultural productivity through better land use planning and the use of

sustainable land management technologies for the environmental, economic and social well-being of the country.

86. The project's objective is to combat land degradation and mitigate its effects through the enhancement of sustainable land management capacities into the planning, development and utilization of land in support of the environmental, social and economic well being of Fiji

87. With the overall aim of building capacities for sustainable land management to ensure sound development, utilization and management of land resources, the project will ensure a clean and healthy environment providing sustainable community livelihoods in Fiji

88. This project is part of the UNDP/GEF LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management. The project addresses the following outcomes under O-15 of the umbrella project.

- Cost-effective use of GEF resources to target countries
- Individual and institutional capacities for SLM will be enhanced – a large part of this project is directed towards these types of capacity building.
- Systemic capacity building and mainstreaming of SLM principles – this project also addresses policy development and mainstreaming of SLM.

89. The Department of Land Resources Planning & Development of the MoA, being the Secretariat of the Land Conservation Board (LCB) is powerless in trying to enforce land conservation measures. It also has limited resources to alleviate the increasing disregard for soil conservation. Raising the awareness on the importance of sustainable land management at various levels will tremendously assist in improving on the use of our resources.

90. In order to improve living standards and the survival of future generations, the underlying premise is to leave the future generation, a similar or better resource endorsement than that we inherited. The solution then, lies in the development and dissemination of sustainable land management techniques that are practical and economical to almost all type of land degradation problems. Institutional infrastructure with enhanced financial and human resources, must be existent and actively functioning for the policies and legislations to be able to be effectively implemented. Also the continuous awareness, trainings and adaptation programs will be encouraged through mainstreaming.

91. Sugarcane cultivation is responsible for the most widespread land degradation. The current sugarcane cultivation on the marginal hilly lands is clearly unsustainable. On Viti Levu alone, 47% of the sugar cane farming are carried out on marginal to steep land areas. Nearly 15,000 hectares of sugar cane land had been identified as requiring urgent soil conservation work and a further 6,500 hectares should be retired from sugar cane and put to a less erosion prone land use. Unsustainable cane cultivation practices are responsible for valuable agricultural land annually going out of production.

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92. The major environmental problems in Fiji include land degradation, waste disposal and pollution. Land Degradation will, if the situation is not remedied, arrest the growth of

agriculture in the country. The essential element of policy is to ensure sustainable development through protection of the environment against activities that threaten long term productive potential.

93. With the implementation of this project, there will be the vision and realization for the incorporation of the National Action Plan into Fiji's strategic development plan. This will also be a basis of accessing financial support for implementation of sustainable land management activities locally through government support. The options government has are as follows; the adoption of the National Rural Land Use Policy for Fiji (RLUP) and formulation of a Rural Land Use Plan, the amendment of the Land Conservation & Improvement Act, strengthening of the Land Conservation Board through human resources and finance.

94. A number of activities and strategies for mainstreaming of sustainable land management is extracted from the NAP framework (refer to NAP framework annexed). This project will initiate its mainstreaming into the National Strategic Development Plan which is Fiji's Medium Term Investment Plan. All stakeholders and sectors will support and show commitment to SLM components within their project proposals and implementation.

95. Fiji has committed itself to the UNCCD obligations since it ratified the United Nation Convention to Combat Desertification (UNCCD) on the 20th of August, 1998. This Medium sized project on Sustainable Land Management will be an initial process towards the achievement of its obligations.

**Expected project outcomes, and outputs**

96. The project will contribute towards the mitigation of land degradation through the promotion of sustainable productive systems that maintain ecosystem productivity and ecological functions while contributing directly to the environmental, economic and social well-being of the country. It will build capacity for sustainable land management for government and civil society institutions/users and mainstreamed into government planning and strategy development.

97. Some key activities need to be undertaken to ensure that capacity building is successful and sustainable. These are reflected in the project outputs grouped under four outcomes.

**Outcome 1:** Increased knowledge and awareness of land degradation and the utility of sustainable land management.

Output 1.1: Generation and improvement of information systems for SLM

Output 1.2: Demonstration activities to engage communities and landowners to increase understanding and awareness on SLM

**Outcome 2:** Enhanced individual and institutional capacities for SLM.

Output 2.1: Local and national stakeholders empowered to promote and enhance SLM

Output 2.2: Awareness raising activities organized around relevant regional, national, sub-national environmental events;

Output 2.3: Enhancement of operational institutional structures and functions to effectively address SLM at local and national levels

Output 2.4: Trained **c**ommunity based facilitators available.

**Outcome 3:** Mainstreaming of SLM principles and objectives.

Output 3.1: Finalization/elaboration of the NAP and identification of specific on-the-ground investments required in the medium to long term;

Output 3.2: Mainstreaming of SLM into NSDP.

Output 3.3: A Medium-Term Investment Plan to secure long-term support for SLM.

**Outcome 4:** Technical support for SLM at district, provincial and national level enhanced.

Output 4.1: Tools, guidelines and manuals for appropriate approaches to capacity development and integrated land use planning options;

Output 4.2: Information management for GIS improved at divisional levels;

Output 4.3: Mapping, monitoring and evaluation improved.

Output 4.4: Incorporation of local and traditional management approaches into community-led integrated land use planning systems

98. The success of the project is partly dependent on the following assumptions:

(i) Land tenure issues are resolved with landowners and tenants showing full agreement;

(ii) Support for the project from corporate organizations such as Fiji Sugar Corporation (FSC), and encourage the participation of their staff in the promotion of SLM;

(iii) The farmers will appreciate the benefits and readily adopt cost effective technologies such as using Vetiver barriers on hedgerows, despite land and its tenure being a major limiting factor;

(iv) The establishment of model farms establishment on farmers' land with joint effort by Extension, Land Use & other relevant organizations will be duplicated by own initiative;

(v) The corporation of extension workers, Agriculture, FSC, FSCGC, NLTB and the Forestry and other stakeholders with the Department of Land Resources Planning and Development to achieve sustainable development and management is committed;

(vi) The project staff will be absorbed into other Sections/Divisions/Ministries long term strategic planning;

(vii) A co-ordinated and concerted effort by various land care groups;

(viii) The knowledge gained by local population will be passed on to other land users from generation to generation;

(ix) Natural disasters which frequently destroy the barriers used as soil conservation measures do not impede or discourage the practice and its implementation;

(x) All legislations and organizations dealings with land, land use, land development and management are coordinated.

(xi) National Rural Land Use Policy principles adopted by government incorporated into sectoral policies.

(xii) Institutional strengthening and resourcing of Land Conservation Board and Land Conservation & Improvement Act recognised.

**Global and local benefits**

99. Whether our concerns are local, national, regional or global, adequate land space has to be provided for the growing population's needs. We can not go on indefinitely paving over the best agricultural lands, clearing forests or developing various other sites with no regard for endangering a nation's economic base. Land Use and Land Degradation is a major issue globally, regionally and locally.

**100. Global benefits**

- Climate change has adverse effects on land degradation which in turn affects ecosystems and biodiversity. The project has synergies with the UNFCCC and UNCBD activities which will not only benefit the present farmers in the Republic of Fiji, but will contribute regionally and globally. The project will enable information and technology transfer universally on research to determine the rate of degradation, assessment and evaluation of appropriate packages to minimize soil loss and will create public awareness on the use and benefits of conserving soils by using certain practices that protect our biodiversity.

- Global cooperation among affected countries and developed countries in designing and financing programmes for combating land degradation and mitigating drought.

- All LDC's and SIDS have commonly related issues related to their poverty. The present trends in land use are already having a negative impact on the socio-economic and external trade situation of developed and undeveloped countries. If this trend continues it will lead to disastrous effects on the world population. For example land degradation and desertification will occur to such as an extent, which will make large parcels of land unproductive and rehabilitation costs extremely high. The net effect will reduce food security, increase poverty and our foreign trade drastically marginalized.

- In order to improve living standards and the survival of future generations, the underlying premise is to leave the future generation, a similar or better resource endowment than that we inherited. The solution then, lies in the capacity of all communities in the promotion, development and dissemination of sustainable land management techniques that are practical and economical to almost all type of land degradation problems.

**101. Local benefit**

- Fiji is a signatory to the United Nation Framework Convention for Climate Change (UNFCCC), United Nation Convention for Bio-Diversity (UNCBD) and the United Nation Convention to Combat Desertification/ Land Degradation (UNCCD). The project will improve the task of coordinating Fiji's commitment

to the UNCCD obligations. It is a stimulant to the production and mainstreaming of the National Action Program.

- Fiji has also committed itself to the Declaration made at the United Nations Millennium Summit in September 2000 on Millennium Development Goals. One of the 8 Goals is to ensure environment sustainability through the integration of the principles of sustainable development into the country's policies and programs to reverse or minimise the loss of environmental resources. However, the SLM project could be used as a catalyst to good effect.

- By acceding to the CCD, Fiji would become a party to the main international instrument dealing with the urgent global problem of land degradation. It will benefit from cooperation with affected countries and with developed countries in designing and implementing its own programmes to combat desertification and mitigate the effects of drought.

- ADB consultant, Clarke in 1989, estimated the cost of conservation works in Rewa and Ba watersheds to be over $18m. The Ministry alone spends over $4m annually on dredging works. Since prevention is better than cure, it would be wise to put in place control measures in the water catchment areas to minimise soil erosion. The project will assist in reducing the volume of dredging and de-silting works required on an annual increment of almost 5%. If all the available low cost sustainable land management technologies are practiced, a substantial decrease in the current average erosion rate of 50 - 80 t/ha/yr is anticipated. This will save soil loss valued around $7.57 - $22.72/ton per year in the ginger growing areas (*NEMP, Report 14*).

- The project is a basis for sustainable environmental, social and economic development through proper land use planning and addressing sound land management issues. Initiating practical on-farm sustainable land management technologies, strengthening and reinforcing institutional capability, capacity building of human resources, research and development, resource information technology development and national land use planning are an integral part of this project from which Fiji will benefit.

- The project encourages national institutional infrastructures under different legislations to mobilize and actively collaborate to pursue the effective implementation of policies and legislations. Also the continuous awareness, trainings and adaptation programs will ensure a society that is always conscious of resource management.

**Linkages to IA activities and programs**

102. UN strategy for a new five year programme to the Pacific Island Countries presented in a paper entitled "Developing a UN Pacific Framework for Action 2008– 2012" focuses on four major themes: equitable economic growth and poverty reduction, good governance and human rights, equitable social and protection services, and environmental management, under the cross- cutting theme of gender equality.

103. The framework is aligned to national and regional priorities, policies and plans for all Pacific Island countries including Fiji. The process aimed to build partnership for development with governments, stakeholders and development partners in line with Millennium Development Goals. New approaches requiring strengthened regional cooperation is an important strategy for overcoming capacity constraints. It also establishes the basis for active and broad consultation with stakeholders and partners for developing a United Nations Development Assistance Framework (UNDAF) for the region. The UN framework jointly focuses on common development outcomes for Pacific people in areas where it can make the most significant difference.

104. UNDP co-financing is the last resort, since adequate local Fiji government funding has already been identified. UNDP's work on Energy and Environment is focused on the following six priority areas which are all relevant to this project:

- Frameworks and strategies for sustainable development
- Effective water governance
- Access to sustainable energy services
- Sustainable land management to combat desertification and land degradation
- Conservation and sustainable use of biodiversity
- National/sectoral policy and planning to control emissions of ODS and POPs

105. Under the Frameworks and strategies for sustainable development**,** UNDP seeks to develop country capacity to manage the environment and natural resources; integrate environmental and energy dimensions into poverty reduction strategies and national development frameworks; and strengthen the role of communities and of women in promoting sustainable development. Effective water governance includes the application of integrated water resources management approaches while access to sustainable energy sources activities seeks to reduce poverty and achieve sustainable development objectives at the local, national and global levels. UNDP's work complements and helps integrate Global Environment Facility (GEF) programmes in the field of climate change and support sustainable livelihoods.

106. On priority area Sustainable land management to combat desertification and land degradation**,** UNDP works to break this cycle and reduce poverty through sustainable land management and by maintaining land-based ecosystem integrity, particularly in drylands where the poorest, most vulnerable and marginalized people live. UNDP assists countries and communities in land governance, drought preparedness, reform of land tenure and promotion of innovative and alternative sustainable land practices and livelihoods. Special emphasis is given here to the situation of rural women.

107. Agreements at the 1992 Rio Earth Summit and the 2002 World Summit on Sustainable Development reinforce The Millennium Declaration and particularly the Millennium Development Goals adopted in 2000 that pledge to "integrate the principles of sustainable development into country policies and programmes, and reverse the loss of environmental resources" (MDG Goal 7, Target 9). Countries confront unprecedented challenges and complexities to successfully ensure environmental sustainability, including carrying out commitments to Multilateral Environmental Agreements. Most

countries have already gone to great lengths regarding both execution and innovation of environmental objectives.

108. Not only implementing agency activities and programs but the government's national strategic planning process is always aligned towards meeting international obligations and Fiji's commitment to achieving the Millennium Development Goals (MDG's) with emphasis on cross-cutting initiatives as well as those that involve capacity assessment and capacity building activities. A number of other projects being undertaken under the Conservation of Biodiversity (UNCBD) and Climate Change (UNFCCC) are related to UNCCD since there is some degree of commonality and similarity among the three conventions and can be easily linked or dealt with in a collaborative way.

109. Linkages already exist with other relevant projects funded through GEF, UNDP, FAO, EU, SPC/GTZ, etc., since the focal ministry is always collaborating with local and international agencies in their implementation. The Department of Land Resources Planning and Development is the only government agency which has some technical skills and knowledge and is involved in sustainable land management activities. Most of these activities need a cross sectoral involvement and often integrated participatory approaches are not taken.

**Linkages to National Capacity Needs Self Assessment (NCSA)**

110 Fiji is also implementing the National Capacity Needs Self-Assessment (NCSA) Project which aims to identify, through a country-driven consultative process, priorities and needs for capacity building to protect the environment and natural resources, taking into account Fiji's party obligations under the three global conventions of biodiversity, climate change, and desertification. The NCSA project will provide key national decision-makers and external funding agencies with essential information about Fiji's specific capacity needs to protect and contribute to managing Fiji's environment. The NCSA will also highlight prioritized national capacity needs, a resource mobilization strategy, and a capacity development action plan to guide further action for the strengthening of national capacity to protect the environment.

111. The NCSA offers SLM MSP the opportunity to combine capacity building assessments, enabling the prospects for synergies in policy formulation at the earliest time. The MSP will also generate capacities that are likely to enhance the enabling framework for addressing global environmental conventions in general. For Fiji, the NCSA is in the early stages of implementation and the targeted capacities for development cannot be definitively predicted before MSP formulation. Regardless, the MSP will support the NCSA findings in several ways.

112. First, the implementation of the MSP outcomes in capacity building will target one of the specific sectors of environmental governance (desertification and deforestation). Second, the MSP may provide a portion of the initial consciousness-raising and technical training obviously required at the political decision-making level. Finally, the MSP investment plan could be an important instrument to finance future capacity building actions targeted by the NCSA beyond the completion of the MSP. Resource mobilization schemes, such as the MSP medium-term investment plan could form an important part of the *Strategy*

*and Action Plan for Capacity Building* that is promoted by the NCSA. The MSP will provide selected parts of the capacity foundation while the NCSA will confirm the overall agenda.

**Stakeholder Involvement Plan**

113. The key stakeholders identified who will be actively involved in this project include government ministries (Agriculture, Forestry, Environment, Lands, Tourism, Town Planning, Fijian Affairs, Infrastructure Development, Education, Provincial Development), national corporate organisations (Fiji Sugar Corporation, Native Land Trust Board, Ginger Council, ets.), Non Government and Civil Society Organisations (Conservational International, Wildlife Conservation Society, World Wide Fund, Partners in Community Development, Birdlife Fiji, etc.), Regional organizations ( SPC, Forum Secretariat, GTZ, SPREP, etc.) Educational Institutions ( University of the South Pacific, Fiji College of Agriculture, Fiji College of Advanced Education, Fiji Institute of Technology, all other Primary & Secondary Schools, etc.) and resource owners/users.

114. The Ministry of Agriculture who is the focal point and as the lead executing agency is the key implementing stakeholder with basically all of its divisions (Land Resources Planning & Development, Research, Extension, Animal Health & Production) have mandates and responsibilities that are directly linked to sustainable land management. The Project Co-coordinator will be the Principal Research Officer, Land Use based at the Department of Land Resources Planning & Development in Suva and will be responsible to the Director of Land Resources Planning and Development for the execution of the project activities. The Department maintains close contact with all stakeholders and is the secretariat to the Land Conservation Board, represents ministry in National Environment Council, Tourism Development Steering Committee, Landcare Steering Committee, etc. It is also responsible for the evaluation and management of Fiji's land (soil) resources in order to optimize productivity through the development and promotion of sustainable land management technologies. The ministry also controls the Fiji College of Agriculture which coordinates and facilitates formal in-service training programs for staff and farmers.

115. The Forestry Department whilst placed within the Ministry for Fisheries and Forests in the government structure is in fact a separate department with its own Act. It's responsibilities include the support and monitoring of rational development of the sector through research, training, technical support and regulatory services, facilitate the development of Fijian forest based businesses, implement sustainable forest management practices, establish forest reserves, genetic resources, biodiversity protection and assessment of local potential for domestic and export market and consumption trends. Despite the good forest cover, the extent of deforestation and its impacts on the surrounding environment remains a serious concern. The immense potential in the forestry sector can become a significant player in the economic development of Fiji.

116. Tourism is the country's largest source of economic growth. Investment activity is high with consequent strong growth in the construction section. Eco-tourism is a strategy for rural development and to increase indigenous participation. To ensure sustainable tourism development, the ministry has embarked on the revision of the Tourism Development Act

and identification of tourism development areas which can sustain the sector within its natural carrying capacity.

117. An independent Ministry of Environment was only formed in 2006. It is mandated to address Fiji's environmental problems. The Environment Management Act controlled by the ministry features a National Environment Management Council to coordinate the formulation of environment management policies, requirements for environment impact assessments and other enforcements to minimize the degradation of natural resources and protect biodiversity.

118. Whilst the Department of Lands is responsible for the management and administration of all State Lands, the Native Lands fall under the jurisdiction of Native Land Trust Board. Tenancy agreements and leasing conditions are drawn up by them and are in charge of ensuring the enforcement. Land husbandry practices to be followed by lessees are also part of the lease conditions.

119. With the inclusion of agricultural science in the school curriculum by the Ministry of Education, a number of schools are constantly approaching the Department for assistance in training and awareness materials to be used for teaching. We are regularly approached for educational materials for projects and assignments.

120. Rational and informed land use will lead to sound utilisation of limited resources with improved socio- economic outcomes. The challenges, however, is how to generate rational and informed land use decisions and if these are accomplished, how to convince other land users/stakeholders to adopt them. Land use planning may be at national, regional or village level. The process ideally involves the participation of the land users. It entails bringing together a wide array of data: physically, technological, economic and institutional, and integrating them systematically for the purpose of developing a workable plan and programme of action.

121. The land use planning process advocated for Fiji should be based on Guidelines for Land Use Planning (FAO 1993); a system that is now adopted as a national planning tool in many countries. While national objectives and local situations vary, the 10 sequential steps in the FAO system are generic and can be adopted to meet such variations.

122. Irrespective of the level and degree of Government intervention in planning, a suitably qualified team is required to create informed opinion on the management of land, and advise decision – makers on the available options and the ramifications of alternative decisions. This team needs both the support of the rural people on the ground and the authority and resources of Government.

123. There is an urgent need to implement a national awareness campaign to explain to landowners and tenants the current legislation related to land use, sustainable land management and the practices and techniques available to achieve sustainability. As a complement to a national awareness programme and to assist the development of communication and interaction at the grass- roots level, Land Care Groups should be established in rural communities with an overall goal of working towards sound land management and improved productivity from the land.

124. In line with the Government's National Strategic Development Plan, one of the priorities is Land Resources Development and Management where the goal is effective management of land resources to ensure sustainable development. The performance indicator of strengthening the institutional capacity of the Land Conservation Board is identified under the policy objective to ensure sound land management and development. As the Secretariat to the Land Conservation Board, the Land Use Section is proposing this plan of action for the enforcement of LCIA, to begin with the setting up of Conservation Committees under Section 6(1) of Chapter 141 (Rev 1985) of the Laws of Fiji. Although the provisions in the Act and the objectives of Land Use Section go hand in hand, the Section had no obligation to the Board as has been seen in the past where the Secretariat has changed hands and Divisions. In order to manage, conserve and improve Fiji's land and water resources, the way forward is to strengthen the unit since the core business functions of both are same.

125. Land Conservation and Improvement Act provides for the appointment of conservation officers as the operational arm of the Board and advising it of conservation activities and requirements within the various Divisional Conservation Committees under the Secretariat of the Land Use Section's three divisional Senior Research Officers.

126. A functional institution, existing under the Land Conservation Board, will be set up with all the financial, physical and human resources required for implementing the requirements of the Act. It is recommended that in due course, Land Use Section be extended to a full division status. Since the overall responsibility of Land Conservation and Improvement Act lies with the Minister for Agriculture it is most advisable to use the services of the ministries locality officers in the various working groups to be set up.

127. .The steps to be taken in due course towards the setting up of Land Care Groups in different localities in Fiji will comprise the formation of District and Provincial Conservation Committees under different committee members reporting to the Divisional Conservation Committees. It is expected to initiate the setting up of Divisional Committees in the Central, Western and Northern Divisions. These Committees will then work towards the next levels.

128. The eventual Land Care Groups could be registered as non-government agencies with eligibility to seek for funds for their activities from donor agencies. In this way the resource owners will eventually be the overall caretakers of their resources with regulatory and advisory services being provided by all line Ministry's hierarchical structure of information dissemination will be in existence and decision makers will always be aware of the needs and wants of the community at large in all localities. To ensure the flow of information from bottom up and vice-versa committee members should always be updating their superiors and subordinates on what's transpiring in different conservation committees.

## FINANCIAL PLAN

### Streamlined Incremental Costs Assessment

129. The overall objective of this MSP is to build or enhance individual and institutional capacities in appropriate government, civil society institutions/user groups and communities to ensure sustainable development and management of land resources.

Although Fiji has already recognised the need to address the Millennium Development Goals and is working towards mainstreaming policies, objectives and activities into government planning and strategic development process, there will always be components of the National Action Plan that need gradual incorporation into the Fiji's strategic development plan. All the activities in the log frame matrix will contribute towards the objectives of the project in one way or another. Since land conservation and management technologies are dynamic depending on land use change and community needs, new activities will evolve in future strategic planning.

130. All activities can be considered as baseline, although some more important than others, and will contribute directly towards the achievement of the project objectives. Apart from GEF incremental funding, other sources of funding will need to be secured since GEF funding is not adequate to address all the sectors. Annual financing from the Government of Fiji and other project funds from EU, Australia, New Zealand, FAO, UNDP, ADP, SPC/GTZ and other donors for all stakeholders will complement the resources mobilization for implementation of the NAP/SLM.

131. The project will develop a comprehensive range of interventions designed to build capacity for developing sustainable land management systems that address and mitigate land degradation problems to ensure sustainable land management in agriculture, forestry, grazing and land uses. It will not deal with land degradation associated with coastal erosion or with urban developments.

132. Baseline activities for this MSP cover the period 2007 – 2010. It covers on-going activities in the broader areas of land management including Integrated Resources Management, sustainable forest management, watershed management and conservation of agricultural land. Activities such as education, training and awareness on SLM, technical and advisory services to communities, research and development, policy and legislation and information generation and dissemination will be complemented through the project. While there will be limited aid in the form of cash local stakeholders will contribute in kind towards the achievement of project activities.

133. GEF financing for this project will complement, widen the scope and strengthen national commitment towards sustainable land management. Furthermore, participatory integrated approaches together with mainstreaming and harmonization of SLM within sectoral planning will ensure continued government financial support for such programs which are expected to be incorporated into the NSDP.

134. Additional and complementary activities funded by donors are being undertaken by almost all stakeholders, not only government but also NGO's. Components of sustainable land management for sustainable livelihoods are being encouraged to be incorporated into all project proposals. Some of the funding sources are EU, Australia, New Zealand, Canada, Japan, Japan, China, Korea, Taiwan, UNDP and ADP.

## Project Budget

135. A summary budget in line with the MSP outcomes as per the PDF-A is given below. A full detailed activity budget follows the logical framework for sustainable land management.

**Table 1: Cost benchmarks (in 1,000 US dollars)**

| Component | GEF | Co-finance | | Total |
|---|---|---|---|---|
| | | Govt Co-finance | Other co-finance | |
| **Outcome1:** Increased knowledge and awareness on SLM . | 100 | 140 | - | 240 |
| **Outcome 2 :** Individual and institutional capacities developed | 260 | 401.5 | - | 661.5 |
| **Outcome 3 :** Mainstreaming and harmonization of SLM | 40 | 30 | - | 70 |
| **Outcome 4:** Technical Support and on the ground investment. | 35 | 92 | - | 127 |
| **Outcome 5:** Adaptive Management & Lessons Learnt | | | | |
| **5.1.** M & E | 27 | 4 | | 31 |
| **5.2** PMU | 13 | 30 | | 43 |
| ***TOTAL MSP*** | ***475*** | ***697.5*** | ***-*** | ***1172.5*** |
| ***SLM PDF- A*** | ***25*** | ***-*** | ***-*** | ***25*** |
| ***GRAND TOTAL MSP +PDF-A*** | ***500*** | ***697.5*** | ***-*** | ***1,197.5*** |

The Ministry of Agriculture's contribution towards the Department of Land Resources and Planning Sustainable Land Management Program exceeds the 1:1 ratio requirement thus other sources who also contribute towards sustainable land management activities in Fiji are not included in this costing.

**Table 2. Detailed description of estimated co-financing sources**

| **Co-financing Sources** | | | | |
|---|---|---|---|---|
| **Name of Co-financier (source)** | **Classification*** | **Type*** | **Amount (US$)** | **Status*** |
| Ministry of Agriculture | Government | Cash | 244,842 | Committed |
| Ministry of Agriculture | Government | In kind | 452,635 | Committed |
| **Sub-Total Co-financing** | | | **697,477** | |

*Classification = government, NGO, multilateral, bilateral
Type = in kind or cash
Status = committed, confirmed, under negotiation

Exchange rate: 0.55US$ = 1FJ$

The table below shows only the important components of the costs involved in the co-finance by Fiji Government. It also shows how we arrived at the figures based on the present government rates.

**Table 3. Estimated Fiji Government Contribution in FJ$.**

| Human Resources | No. | % | Unit cost | Annual Total | Project Total |
|---|---|---|---|---|---|
| Director(LRPD) | 1 | 10 | $41,367.00 | $4,136.70 | $16,546.80 |
| Principal Research Officer | 1 | 40 | $33,164.00 | $13,265.60 | $53,062.40 |
| Senior Research Officers | 3 | 60 | $25,258.00 | $45,464.40 | $181,857.60 |
| Agricultural Officers | 3 | 80 | $18,612.00 | $44,668.80 | $178,675.20 |
| Technical Officers | 2 | 80 | $14,062.00 | $22,499.20 | $89,996.80 |
| Senior Technical Assistants | 6 | 100 | $9,871.00 | $59,226.00 | $236,904.00 |
| Agronomist | 2 | 5 | $25,258.00 | $2,525.80 | $10,103.20 |
| Hydrologist | 1 | 5 | $33,584.00 | $1,679.20 | $6,716.80 |
| Drainage / Irrigation Engineer | 1 | 10 | $33,584.00 | $3,358.40 | $13,433.60 |
| Surveyor | 1 | 5 | $25,258.00 | $1,262.90 | $5,051.60 |
| Rural Sociologist | 1 | 20 | $23,854.00 | $4,770.80 | $19,083.20 |
| Agro-Economist | 1 | 5 | $25,258.00 | $1,262.90 | $5,051.60 |
| Environmental Specialist | 1 | 5 | $32,450.00 | $1,622.50 | $6,490.00 |
| SUB TOTAL (FJD) | | | | $205,743.20 | $822,972.80 |
| **Physical & Financial Resources** | | | | | |
| Office Space (18'x12'room) | 1 | 100 | $216.00/mth | $2,592.00 | $10,368.00 |
| Vehicles for project work | 3 | 50 | $50,000.00 | $75,000.00 | $300,000.00 |
| Hardware & software (maintenance,upgrades) | | | | $20,000.00 | $80,000.00 |
| Draughting equipment & materials | | | | $5,000.00 | $20,000.00 |
| OHS equipments | | | | $1,000.00 | $4,000.00 |
| Operation & maintenance | | | | $4,500.00 | $18,000.00 |
| Communications(local) | | | | $1,200.00 | $4,800.00 |
| Stationeries | | | | $2,000.00 | $8,000.00 |
| Sub Total (FJD) | | | | $111,292.00 | $445,168.00 |
| **GRAND TOTAL (FJD)** | | | | **$317,035.20** | **$1,268,140.80** |
| **GRAND TOTAL (US$)** | | | | **174,360.25** | **697,477.44** |

**Table 4: Total Project Administration Budget (USD)**

| Component | Estimated man/weeks | GEF | GoF | Total |
|---|---|---|---|---|
| Project Management Unit | | 13,000 | 30,000 | 43,000 |
| Monitoring & evaluation | | 27,000 | 4,000 | 31,000 |
| Project staff/local consultants | 665 | 60,000 | 422,635 | 482,635 |
| Overseas consultant | 10 | 15,000 | - | 15,000 |
| Office facilities | | - | 10,368 | 10,368 |
| Maintenance & operation | | 50,000 | 210,234 | 260,234 |
| Goods & services | | 40,000 | 13,200 | 53,200 |
| Procurements(vehicle, equipments) | | 70,000 | - | 70,000 |
| Stationeries & computer consumables | | 30,000 | 4,400 | 34,400 |
| Travel & subsistence | | 60,000 | - | 60,000 |
| Printing & publications | | 20,000 | | 20,000 |
| Communications | | 10,000 | 2,640 | 12,640 |
| Training s & workshops | | 60,000 | | 60,000 |
| Miscellaneous | | 20,000 | - | 20,000 |
| **Total** | | **475,000** | **697,477** | **1,172,477** |

**Table 5: Project Management costs**

| *Component* | *Estimated consultant weeks* | *GEF($)* | *Other sources ($)* | *Project total ($)* |
|---|---|---|---|---|
| Local consultants | | | 24,000 | 24,000 |
| International consultants | 0 | 0 | 0 | 0 |
| Office facilities, equipment, vehicles and communications | | 3,000 | 2,000 | 5,000 |
| Travel | | 2,000 | 500 | 2,500 |
| Workshop/meetings facilities | | 6,000 | 2,000 | 8,000 |
| Miscellaneous | | 2,000 | 1,500 | 3,500 |
| **Total** | | **13,000** | **30,000** | **43,000** |

**Table 6: Consultants working for technical assistance components**

| *Component* | *Estimated consultant weeks* | *GEF($)* | *Other sources ($)* | *Project total ($)* |
|---|---|---|---|---|
| Local consultants | | 5,000 | 9,500 | 14,500 |
| International consultants | | 15,000 | 0 | 15,000 |
| **Total** | | **20,000** | **9,500** | **29,500** |

136. There is no deviation from the recommended outputs of the SLM proposal. Since the Fiji Government contribution to this project through the Ministry of Agriculture already exceeds the GEF Council approved $500,000 for this Targeted Portfolio Project, the calculations for co-finance stopped at the Department of Land Resources Planning & Development only. This does not mean that there is no contribution, financial or in-kind, from a number of other stakeholders towards this project.

## PART III: MANAGEMENT ARRANGEMENTS

## PROJECT IMPLEMENTATION PROCESS

### Institutional framework and project implementation arrangements

137. The project will be implemented over a period of four years beginning in 2007 as soon as funds are transferred within the Fiji Government allocation. The implementation agency for the project will be the UNDP Fiji Country Office. The project will be executed under UNDP National Execution (NEX) procedures. The lead executing agency for the project will be the Department of Land Resources Planning & Development of the Ministry of Agriculture. The Department will be directly responsible for the timely delivery of inputs and outputs and for coordination with all other executing agencies. The project will be guided by a high level oversight from the National Coordinating Body. The Land Conservation Board as the National Coordinating Body is composed of the Chief Executive Officers or designated representatives of major stakeholders and farmers representatives. The composition and functions of the Board is presented in the Annex. The Board normally meets once every quarter but may be briefed by the Secretariat whenever the need arises. Land Use Section of the Ministry will provide technical support to the project in consultation with relevant agencies with expertise in respective fields. Land Resources Division of the Regional organization, Secretariat for the Pacific Community will also be consulted for advice. Since the Land Conservation Board

Secretary and Chairmanship is within the Ministry of Agriculture where the Focal Point and the lead executing agency are based, it will ensure close collaboration, regular updates and feedbacks on the SLM project.

138. The Project Co-coordinator will be the Principal Research Officer, Land Use based at the Department of Land Resources Planning & Development in Suva, and will be responsible to the Director of Land Resources Planning and Development for the execution of the project activities. The Department maintains close contact with all stakeholders, national co-operations such as the Fiji Sugar Corporation, the Ginger Council, the Land Conservation Board, the Native Land Trust Board (NLTB), GTZ, Forum Secretariat, SPREP, UNCCD, UNFCCC & UNCBD Focal Points and a number of local, regional and international organisations, etc. There are positive indications of support from most of the stakeholders and the coordinator is already participating in a number of other sectoral consultations.

139**.** **Responsibilities for managing funds** will be administered by the Project Coordinator who is based with the lead executing agency with assistance from the Accounts Section of the Ministry of Agriculture and Finance. The offer and management of all sub-contracts with local service providers and stakeholders will be done in accordance with the existing Government of Fiji Financial Management Regulations.

140. The project funds be reimbursed twice annually by UNDP Country Office to the Project Coordinator through the Government Treasury and Ministry of Finance and kept as a separate Trust Account. The Chief Executive Officer of the Ministry of Agriculture will be accountable for all local operational funding of the executing agency. At the end of the three-month period, the PMU will submit justification for expenses and the funds spent will be renewed by UNDP.

141. Criteria and procedures will be developed for performance-based sub-contracts and service providers. Under performance-based contracts, the service provider will be paid only for work completed. Work partially completed will be paid on a *pro rata* basis.

142. The project will comply with UNDP's monitoring, evaluation and reporting requirements as spelled out in the UNDP Programming Manual. The Project Coordinator will have lead responsibility for reporting requirements to UNDP.

143. The Project Co-coordinator will be the Principal Research Officer – Land Use, based at the Department of Land Resources Planning & Development in Suva and will be responsible to the Director for the execution of the project activities. He is expected to maintain close contacts with the national co-operations such as the Fiji Sugar Co-operation, the Ginger Council, the Soil Conservation Board, and the Native Land Trust Board (NLTB) etc. His major duties will be to help organize the followings:

(i) Site selection for the Research and Model farms to be set up on the basis of soil surveys, land uses, farming systems and other agro-ecological factors.

(ii) Design experiments, analyses, interpretation and simulations of data arising from the trials;

(iii) Provide technical advice to farmers and other Non-Government Organizations (NGO's), based on the existing land use policies;

(iv) Organize regular meetings and training courses;

(v) Monitoring tours and trials.

(vi) Creation & maintenance of land resource based information data bases with continuous updating.

(vii) Review the ongoing research on various land use practices.

(viii) Preparation of Sustainable Land Use Newsletters and other publications.

(ix) Monitoring the funds provided by the donor agency.

(x) Organize a coordinating committee meeting every quarter.

144. The National Coordinating Body comprising of the Land Conservation Board members, Permanent Secretary for the MoA, MFF, Public Works, Lands, Director of Environment, and representatives from the FSC, Native Land Trust Board (NLTB), the Ginger Council and the Project Co-coordinator will be set up to co-ordinate the project activities and make necessary policy decisions on matters affecting the project.

145. A steering committee made up of members from the Divisional Committees will be set up in each of the three Divisions to ensure the support of all other organizations in the implementation of the project activities at the Divisional level. Its duties will include:

(i) Advice on the amount of planting materials (pineapple suckers, vetiver grass and fodder tree crops) to be planted in the nurseries each month.

(ii) Advice on the localities with priority SLM needs and provide extension services to the farmers.

(iii) Assist the Land Use Section in the divisions on the organization of training courses, meetings, field days etc. in each Division.

(iv) To assist in the monitoring and report of project activities on monthly meetings.

(v) To set up Watershed Management Committees to monitor and advice on the requirements of the different localities.

146. The Project Coordinator will be assisted in the management by the Land Use Section's Divisional offices. It has staff in the divisional offices in the North, West and Central /Eastern divisions. Trained staff in the Research, Extension, Animal Health, communities and other land conservationists will work in collaboration

**GEF LOGO**

*In order to accord proper acknowledgement to GEF for providing a GEF logo should appear alongside the UNDP logo on all relevant GEF project publications including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF, should also accord proper acknowledgement to the GEF.*

## PART IV: MONITORING AND EVALUATION

### Monitoring and Evaluation Plan

147. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures as per the Resource Kit on Monitoring, Evaluation & Reporting for SLM and will be provided by the Project Coordinator and the UNDP Country Office (UNDP-CO) with support from UNDP/GEF. The Logical Framework Matrix in the Annex provides *performance* and *impact* indicators for project implementation along with their corresponding *means of verification*. These will form the basis on which the project's Monitoring and Evaluation system will be built.

**Performance Indicators**

148. These are shown in the project logical framework. The indicators will show the achievement of all outputs on a quarterly basis.

**Performance Indicators during operation**

149. The Ministry already has a project monitoring team who will also be expected to include this project into their list. Quarterly progress reports are prepared and submitted for Ministry of Finance & National Planning evaluations.

150. Annual evaluations will be done by the Project Coordinator with the National Coordinating Body(LCB), UNDP Country Office and the Ministry of Agriculture Monitoring team. One independent external mid-term review (MTR) will be performed after 2 years months and another final evaluation will be conducted during the last three months of the project. Each review will consist of a three week evaluation and reporting. The focus of the evaluations will be to make any reviews, corrections and performance improvements needed to better achieve the project objective and outcomes during the life of the project.
In-line with the UNDP – GEF Monitoring and Evaluation Tool Kit, the project coordinator will ensure the completion and submission to UNDP CO with the *National MSP Annual Project Review Form* by early July annually for progress & review.

**Project Inception Phase**

151. A Project Inception Workshop will be conducted with the full project team, relevant government counterparts, NGO's, co-financing partners, the UNDP-CO and representation from the UNDP-GEF Regional Coordinating Unit as appropriate. A fundamental objective of this Inception Workshop will be to assist the project team to understand and take ownership of the project's goals and objectives, as well as finalize preparation of the project's first annual work plan on the basis of the project's logframe matrix. This will include reviewing the logframe (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise finalize the Annual Work Plan (AWP) with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project.

152. Additionally, the purpose and objective of the Inception Workshop (IW) will be to: (i) introduce project staff with the UNDP-GEF *expanded team* which will support the project during its implementation, namely the CO and responsible Regional Coordinating Unit staff; (ii) detail the roles, support services and complementary responsibilities of UNDP-CO and RCU staff vis à vis the project team; (iii) provide a detailed overview of UNDP-GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Project Report (APR), Tripartite Review Meetings, as well as the Mid-Term Review. Equally, the IW will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget rephasings.

153. The IW will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff and decision-making structures will be discussed again, as needed, in order to clarify for all, each party's responsibilities during the project's implementation phase.

## Monitoring responsibilities and events

154. A detailed schedule of project review meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for Tripartite Reviews, National Coordinating Body & Steering Committee Meetings, and (ii) project related Monitoring and Evaluation activities.

155.. *Day to day monitoring of implementation progress* will be the responsibility of the Project Coordinator based on the project's Annual Work Plan and its indicators. The Project Coordinator will inform the UNDP-CO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.

156. The Project Coordinator will fine-tune the progress and performance/impact indicators of the project in consultation with the full project team at the Inception Workshop with support from UNDP-CO and assisted by the UNDP-GEF Regional Coordinating Unit. Specific targets for the first year implementation progress indicators together with their means of verification will be developed at this Workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan. The local implementing agencies will also take part in the Inception Workshop in which a common vision of overall project goals will be established. Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

157. Measurement of impact indicators related to global benefits will occur according to the schedules defined in the Inception Workshop and tentatively outlined in the indicative Impact Measurement Template at the end of this Annex. The measurement, of these will be undertaken through subcontracts or retainers with relevant institutions (e.g. vegetation cover via analysis of satellite imagery, or populations of key species through inventories) or through specific studies that are to form part of the projects activities (e.g. measurement carbon benefits from improved efficiency of

ovens or through surveys for capacity building efforts) or periodic sampling such as with sedimentation.

158. *Periodic monitoring of implementation progress* will be undertaken by the UNDP-CO through quarterly meetings with the project proponent, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

159. UNDP Country Offices and UNDP-GEF RCUs as appropriate, will conduct yearly visits to projects that have field sites, or more often based on an agreed upon scheduled to be detailed in the project's Inception Report /Annual Work Plan to assess first hand project progress. Any other member of the Steering Committee can also accompany, as decided by the SC. A Field Visit Report will be prepared by the CO and circulated no less than one month after the visit to the project team, all SC members, and UNDP-GEF.

160. *Annual Monitoring* will occur through the ***Tripartite Review (TPR).*** This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to Tripartite Review (TPR) at least once every year. The first such meeting will be held within the first twelve months of the start of full implementation. The project proponent will prepare an Annual Project Report (APR) and submit it to UNDP-CO and the UNDP-GEF regional office at least two weeks prior to the TPR for review and comments.

161. The APR will be used as one of the basic documents for discussions in the TPR meeting. The project proponent will present the APR to the TPR, highlighting policy issues and recommendations for the decision of the TPR participants. The project proponent also informs the participants of any agreement reached by stakeholders during the APR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary.

***Terminal Tripartite Review (TTR)***

162. The terminal tripartite review is held in the last month of project operations. The project proponent is responsible for preparing the Terminal Report and submitting it to UNDP-CO and LAC-GEF's Regional Coordinating Unit. It shall be prepared in draft at least two months in advance of the TTR in order to allow review, and will serve as the basis for discussions in the TTR. The terminal tripartite review considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation of formulation.

163. The TPR has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks will be developed at the Inception Workshop, based on delivery rates, and qualitative assessments of achievements of outputs.

## Project Monitoring Reporting

164. The Project Coordinator in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process. Items (a) through (f) are mandatory and strictly related to monitoring, while (g) through

(h) have a broader function and the frequency and nature is project specific to be defined throughout implementation.

### *(a) Inception Report (IR)*

165. A Project Inception Report will be prepared immediately following the Inception Workshop but not later then 3 months after the official project starting date. It will include a detailed First Year/ Annual Work Plan divided in quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan would include the dates of specific field visits, support missions from the UNDP-CO or the Regional Coordinating Unit (RCU) or consultants, as well as time frames for meetings of the project's decision-making structures. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time frame.

166. The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may effect project implementation.

167. When finalized the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP Country Office and UNDP-GEF's Regional Coordinating Unit will review the document.

### **(b) Annual Project Report (APR)**

168. The APR is a UNDP requirement and part of UNDP's Country Office central oversight, monitoring and project management. It is a self-assessment report by project management to the CO and provides input to the country office reporting process and the ROAR, as well as forming a key input to the Tripartite Project Review. An APR will be prepared on an annual basis prior to the Tripartite Project Review, to reflect progress achieved in meeting the project's Annual Work Plan and assess performance of the project in contributing to intended outcomes through outputs and partnership work.

169. The format of the APR is flexible but should include the following:
- An analysis of project performance over the reporting period, including outputs produced and, where possible, information on the status of the outcome
- The constraints experienced in the progress towards results and the reasons for these
- The three (at most) major constraints to achievement of results
- AWP, CAE and other expenditure reports (ERP generated)
- Lessons learned
- Clear recommendations for future orientation in addressing key problems in lack of progress

### *(c) Project Implementation Review (PIR)*

170. The PIR is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from ongoing projects. Once the project has been under implementation for a year, the

CO together with the project must complete a Project Implementation Report. The PIR can be prepared any time during the year (July-June) and ideally prior to the TPR. The PIR should then be discussed in the TPR so that the result would be a PIR that has been agreed upon by the project, the executing agency, UNDP CO and the concerned RC.

171. The individual PIRs are collected, reviewed and analyzed by the RCs prior to sending them to the focal area clusters at the UNDP/GEF headquarters. The focal area clusters supported by the UNDP/GEF M&E Unit analyze the PIRs by focal area, theme and region for common issues/results and lessons. The TA's and PTA's play a key role in this consolidating analysis.

172. The focal area PIRs are then discussed in the GEF Interagency Focal Area Task Forces in or around November each year and consolidated reports by focal area are collated by the GEF Independent M&E Unit based on the Task Force findings.

173. The GEF M&E Unit provides the scope and content of the PIR. In light of the similarities of both APR and PIR, UNDP/GEF has prepared a harmonized format for reference.

***(d) Quarterly Progress Reports***

174. Short reports outlining main updates in project progress will be provided quarterly to the local UNDP Country Office and the UNDP-GEF regional office by the project team. See format attached.

***(e) Periodic Thematic Reports***

175. As and when called for by UNDP, UNDP-GEF or the Implementing Partner, the project team will prepare Specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report will be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learnt exercise, specific oversight in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered. UNDP is requested to minimize its requests for Thematic Reports, and when such are necessary will allow reasonable timeframes for their preparation by the project team.

***(f) Project Terminal Report***

176. During the last three months of the project the project team will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met, or not achieved, structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities.

**(g)** ***Technical Reports*** (project specific- optional)

177. Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project and its sites.

These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

**(h)** ***Project Publications*** (project specific- optional)

178. Project Publications will form a key method of crystallizing and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. The project team will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognizable format. Project resources will need to be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget.

**2. INDEPENDENT EVALUATIONS**

179. The project will be subjected to at least two independent external evaluations as follows:

***(i) Mid-term Evaluation***

180. An independent Mid-Term Evaluation will be undertaken at the end of the second year of implementation. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

***(ii) Final Evaluation***

181. An independent Final Evaluation will take place three months prior to the terminal tripartite review meeting, and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

**Audit Clause**

182. The Government will provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Finance manuals. The Audit will be conducted by the legally recognized auditor of the Government.

**Indicative Monitoring & Evaluation Plan and Budget.**

| Type of M&E activity | Lead responsible party in bold | Budget (US $) | Time frame |
|---|---|---|---|
| Inception Workshop & Report | **Project Coordinator** UNDP Country Office UNDP-GEF National Coordinating Body | $3,000 | Within the first 3 months of project implementation |
| Annual Project Review (APR) / Project Implementation Review (PIR) | The Government, Focal Point, Project Coordinator, Executing Agency, **Project Team**, UNDP Country Office UNDP/GEF Task Manager[1] | $1,000 | Every year, at latest by June of that year |
| Tripartite Project Review meeting and report (TPR) | The Government, **UNDP Country Office,** Executing Agency, Project Team & Stakeholders, UNDP/GEF Task Manager | $500 | Every year , I month upon receipt of APR |
| Mid-term External Evaluation | Project team, UNDP/GEF headquarters, UNDP/GEF Task Manager**, UNDP Country Office, Executing Agency** | $7,000 | 2 years after project implementation. |
| Final External Evaluation | The Government, Project team, UNDP/GEF headquarters, UNDP/GEF Task Manager, **UNDP Country Office, Executing Agency** | $10,000 | At the end of project implementation, |
| Terminal Report | UNDP Country Office, UNDP/GEF Task Manager, **Project Team/ Coordinator,** National Coordinating Body | $1,500 | At least one month after the end of the project |
| Audit | **Executing Agency**, UNDP Country Office, Project Team/ Coordinator, Mninstry of Finance(Audit) | $1,000 | Yearly |
| Visits to field sites | **UNDP Country Office, Executing Agency, Project Coordinator** | $1,000 | Yearly |
| Lessons learnt | UNDP-GEF, GEFSEC, **Project Team/Coordinator,** Executing Agency/Stakeholders | $2,000 | After mid-term and final reports. |
| **TOTAL COST** | | **$31,000** | |

[1] UNDP/GEF Task Managers is a broad term that includes regional advisors, sub-regional coordinators, and GEF project specialists based in the region or in HQ.

**RESPONSE TO GEF SECRETARIAT REVIEW**

Provide a concise response to all points raised by GEF Secretariat after first submission (if any).

| GEFSEC Comment | Response | Location where document was revised |
|---|---|---|
| | | |
| | | |
| | | |

**SECTION II : STRATEGIC RESULTS FRAMEWORK**

**Project Logical Framework**

| Project Strategy | Objectively verifiable indicators | Sources of verification | Risks and Assumptions |
|---|---|---|---|
| **Goal :** Sustainable land management capacities developed and mainstreamed into government strategic planning ands development to ensure sustainable developments and utilization of land resources leading to an enhanced heritage for future generations. | | | |
| **Objective of the project** | To combat land degradation and mitigate its effects through the enhancement of sustainable land management capacities into the planning, development and utilization of land to enhance environmental, social and economic well being of Fiji | | |
| **Outcome 1 :** Increased knowledge and awareness of land degradation and the utility of SLM | Well maintained LIS/GIS.<br>Data collated, analyzed, standardized.<br>Land resources information readily available.<br><br>Research and development on SLM.<br><br>SLM demonstration farms established.<br>Monitoring and mapping of land degradation.<br><br>Knowledge sharing and networking. | GIS applications and outputs.<br>Satisfactory clients.<br><br>Research reports.<br><br>No. of farms established.<br>Land degradation maps.<br><br>Quarterly, annual & review reports. | Free or easy data exchange.<br>Research committed.<br>Adequate funds.<br>Willing partners.<br>Satellite data available on time. |
| **Outcome 2 :** Enhanced individual and institutional capacities for SLM | Relevant stakeholder trainings on SLM.<br>Community education, training and awareness conducted.<br>Community based facilitators trained.<br>Formal trainings for staff.<br><br>Institutions addressing SLM strengthened | No. of Trainings, workshops.<br><br>No. of staff trained.<br><br>Land Conservation Board, Forestry Board.<br>Environment management Council.<br>Quarterly, annual & review reports. | Support from collaborators.<br>Dedicated participants.<br>Government approvals on time. |
| **Outcome 3 :** Mainstreaming of SLM | Finalization & cabinet approval of NAP.<br><br>SLM Policies and legislations reviewed.<br><br>Cross sectoral recognition for SLM in development planning<br><br>NAP and SLM integrated into national strategic planning<br>Progress towards MDG indicators | NAP published.<br><br>Completed sectoral policies.<br><br>National Strategic Plan.<br>MDG report.<br><br>Quarterly, annual & review reports.<br>Quarterly, annual & review reports. | Sectoral acceptance.<br>Government support.<br>Solicitor General's office gives priority.<br>Close co-operation in panning. |
| **Outcome 4 :** Technical support for SLM at district, provincial and national level enhanced | Tools, guidelines and manuals published.<br>SLM incorporated into the educational system.<br>Information resources centres established.<br><br>Participatory integrated land use planning adopted.<br><br>Adequate resourcing of NAP/SLM.<br>SLM technology transfer needs addressed | Publications.<br>Education Curriculum.<br>No. of Resource centres.<br><br>Integrated development<br><br>National budgets.<br>Quarterly, annual & review | Public realization.<br>Land tenure problems resolved.<br>Adequate funds.<br>Increased adoption.<br>Better communications infrastructure. |

| **Outcome 1:** Increased knowledge and awareness of land degradation and the utility of SLM | | | | |
|---|---|---|---|---|
| **Outputs** | **Output Indicator** | **Activities** | **Target** | **Responsibility** |
| **Outcome 1:** Increased knowledge and awareness of land degradation and the utility of SLM | | | | |
| **Output 1.1** : Generation and improvement of information systems for SLM | Updated forest inventory, agricultural land use and socio-economic maps. | 1.1.1 Generate resource information databases. | National forest inventory, agricultural land use and socio-economic surveys updated. by year 2 | MoA, MoF, BOS |
| | Sustainable agriculture and forestry modules published. | 1.1.2 Develop training modules on sustainable farming systems. | Training handbooks on SLM technologies in year 4. | Land Use, |
| | Trained technicians to handle GIS applications. | 1.1.3 GIS hardware and software upgraded. | Fully functional GIS unit with adequate hardware and software in year 1 . | LRPD |
| | Digital resource information available for applications. | 1.1.4 Data acquisition and conversion | | |
| | Land degradation reports. | 1.1.5 Conduct pilot land degradation assessment surveys | Land degradation reports of 3 districts annually. | MoA, MoF, Lands |
| | Divisional offices with adequate information at hand. | 1.1.6 Facilitate resource information centers for SLM | 3 divisional resource centres adequately equipped with SLM information in year 3. | Project Coordinator |
| | Communities in close contact with advisors for technical support. | 1.1.7 Create district and provincial networks. | Database of all collaborators, stakeholders in an area in year 3. | All stakeholders |
| ***Baseline:*** *Although there is enough information in existent in most sectors, these are not available digitally or in a format that could be used for the promotion of SLM. The GIS/LIS technology has been in existence for the more than a decade but its development and use is still in the infancy stage. Although land husbandry practices are legislated, there is no system of monitoring SLM best practices therefore a degradation assessment is a prerequisite to start the monitoring process. Currently whatever information that exists on SLM seems to be centralized or sectoralised, hence decentralization of information centres will ensure that information is widely available to all stakeholders.* | | | | |
| **Output 1.2 :** Demonstration activities to engage communities and landowners to increase understanding and awareness on | Public well versed with sustainable land management practices. | 1.2.1 Training and awareness on SLM<br>1.2.2 Establish demonstration farms in | 6 workshops and 3 field days conducted annually.<br>3 demonstration farm in the West, North & Central divisions | LRPD<br>Land Use |

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|---|---|---|---|---|
| SLM | Information on SLM readily available. | localities.<br>1.2.3 Production and dissemination of awareness materials. | annually.<br>3 posters, pamphlets, technical bulletins, and training guides published annually. | NGO's, Agriculture, Forests, Environment |
| ***Baseline :*** *Demonstration farms have been established on few locations with assistance from DSAP and has proven to be a good form of hands-on training for adoption of SLM technologies in agriculture. These demo farms are only in a few areas and there is a need for a wider establishment in all rural areas in Fiji.* | | | | |
| **Outcome 2:** Enhanced individual and institutional capacities for SLM | | | | |
| **Output 2.1:** Local and national stakeholders empowered to promote and enhance SLM | All stakeholders well trained and skilled with SLM promotion.<br>Good networking among stakeholders.<br>Planning and transfer of practices well coordinated.<br>SLM addressed by all stakeholders within their programs. | 2.1.1 Conduct workshops for related stakeholders.<br>2.1.2 Conduct trainings on land capability and land use planning for different uses of land.<br>2.1.3 Setup interagency working group for SLM.<br>2.1.4 Conduct trainings on technology transfer.<br>2.1.5 Formalize trainings for resource persons. | 3 workshops annually on Land care concepts.<br>One training on the use of LIS/GIS to SLM conducted annually for relevant stakeholders.<br>Transfer knowledge on SLM technology and integrated land use planning to stakeholders throughout the project period..<br>Identify cooperators in all localities in year 1.<br>Upgrade skills of facilitators ongoing. | Project Coordinator<br>Land Use<br><br>Steering Committee<br><br>Land Use, Research, Extension |
| ***Baseline****: There is general awareness on resource conservation among stakeholders but there is limited promotion of SLM issues and technologies.* | | | | |
| **Output 2.2:** Awareness raising activities organized around relevant regional, national, sub-national environmental events; | Public awareness created.<br>Individuals sensitive to environmental sustainability.<br>SLM promoted. | 2.2.1 Produce leaflets and posters and display materials on SLM.<br>2.2.2 Upgrade display materials<br>2.2.3 Plan and organize multimedia presentations. | Participate in National Environment Week.<br>Participate in National Arbor Week.<br>University Open Day.<br>Related field days.<br>Annual Agricultural Show<br>Adhoc organizational workshops.<br>All events organized annually. | Information, Agriculture, Forestry, Environment, NGO's |
| ***Baseline:*** *National environmental events are held regularly but not enough emphasis is given to SLM components. This is an opportune time to promote SLM among primary, secondary and tertiary institution and the general public.* | | | | |

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|---|---|---|---|---|
| **Output2.3:**Enhancement of operational institutional structures and functions to effectively address SLM at local and national levels | Relevant policies and laws meet present day needs addressing changing land use. | 2.3.1 Review and develop policy briefs and strategies for the promotion.<br>2.3.2 Land tenure and land use legislations amended for policy enforcement. | 5 Yearly Review of the Rural Land Use Policy, the Forestry Policy, Tourism Policy and Urban Development Policy.<br>Legislation amendments drafted by 2010. | Lands, NLTB, MoA, MoF, MoT, TCP,<br><br>Legal Officer<br>LCB. |
| *Baseline: Legislations exists on land use and land tenure but were created during the colonial and needs revision* | | | | |
| **Output 2.4:** Trained **c**ommunity based facilitators available. | Promotion of SLM technologies within localities.<br>Training of trainers and farmer to farmer trainings conducted.<br><br>Resource persons and materials easily available.<br><br>Trained facilitators.<br>Partnerships formed or strengthened. | 2.4.1 Train community based facilitators.<br>2.4.2 Facilitate networking among collaborators and communities.<br>2.4.3 Orgainze workshops, seminars, etc.<br>2.4.4 Develop tools, manuals, guidelines.<br>2.4.5 Develop partnerships based on Land care concept | 20 community based facilitators trained annually.<br>Land care steering committees set up.<br>3 annual workshops in different localities.<br><br>Community based facilitators adequately equipped.<br>Monitoring and assessment tool developed in 1st year.<br>Initiate formation of 3 land care groups in year 2,3 & 4.. | Land Use,<br>Research,<br>Extension,<br>NGO's<br>FSC<br><br>Project Coordinator |
| *Baseline: National Land care steering committee has been set up with the objective of promoting the concept. In order to promote the land care concept at district level, there is a need for adequate facilitators with resources equipped for SLM promotion* | | | | |
| **Outcome 3 :** Mainstreaming of SLM | | | | |
| **Output3.1:** Finalization/elaboration of the NAP and identification of specific on-the-ground investments required in the medium to long term | Formal adoption of NAP by Fiji Government and stakeholders<br><br>NAP integrated into National Strategic Development Plan.<br><br>The National Budget or Medium-Term Development Plan allocate funding to the | 3.1.1 Finalization of the NAP.<br><br>3.1.2 Government endorsement and adoption of NAP.<br>3.1.3 NAP published and circulated for awareness.<br>3.1.4 Workshop on stakeholder contribution towards NAP implementation. | Final approved NAP published and circulated to stakeholders by 2007.<br>4 Workshops on NAP promotion in year 1.<br>Strategies and activities incorporated into sectoral plans by 2009.<br>Annual workshops to delegate responsibilities and identify institutions. | Focal Point, NCB<br>Steering Committee<br>MoF & NP<br><br>Project Coordinator<br>All Stakeholders |

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|---|---|---|---|---|
| | NAP | | | |
| ***Baseline:*** *NAP developed but needs active promotion for a wider acceptance among all parties and the realization that activities and strategies need to be incorporated into sectoral planning and management* | | | | |
| **Output 3.2 :** Mainstreaming of SLM into NSDP | SLM is mainstreamed into relevant national plans (e.g. agriculture, forestry, tourism, urban and rural development policies)<br><br>SLM is mainstreamed into National Millennium Development (MDG) Goals processes<br><br>Effective legislations for SLM enforcement. | 3.2.1 Integrate SLM into agriculture, forestry tourism, urban and rural development policies and plans.<br><br>3.2.2 Integrate SLM into National MDG reporting process.<br><br>3.2.3 Legislations reviewed and SLM components incorporated. | All land development planning to contain SLM component. Workshop in year 2.<br><br>Submission of reports for National MDG reporting annually.<br><br>Land Conservation Act, Forestry Act, Environment Management Act reviewed for amendment by the year 3.. | MoA, MoF, MoT, MoE, TCP, |
| ***Baseline:*** *Environmental sustainability is one of the guiding principles of the NSDP but SLM does not take the fore-front in the sectoral planning and formulation of proposals. Ministry of Finance and National Planning needs to realize that SLM is an integral part of environmental sustainability.* | | | | |
| **Output 3.3;**<br>A Medium-Term Investment Plan to secure long-term support for SLM. | Fixed commitment from the Ministry of Finance from annual budget.<br><br>% of surveyed/targeted land-users, NGOs, private sector with information on and access to the financial mechanism with the Mid-term Investment plan. | 3.3.1 Identify priority SLM needs and opportunities for all sectors.<br><br>3.3.2 Develop proposals for SLM development projects.<br><br>3.3.3 Develop a costed Medium Term SLM Investment Plan | SLM investment plan by 2011.<br><br>Annual Project proposals with SLM components in-built.<br><br>Financial approval for SLM related projects once every year. | All stakeholders, |
| ***Baseline :*** *Presently funding seems to be sought for issues as and when problems arise. Whatever resources are available is through donor assistance on adhoc basis but adequate resources need to be locally provided to relevant government institutions.* | | | | |
| **Outcome 4 :** Technical support for SLM at district, provincial and national level enhanced | | | | |

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|---|---|---|---|---|
| **Output 4.1:** Tools, guidelines and manuals for appropriate approaches to capacity development and integrated land use planning options | Increased SLM awareness.<br>All extension officers accessible to information.<br>Materials available in Agricultural Science institutions | 4.1.1 Compile and organize promotional materials.<br>4.1.2 Design pamphlets, leaflets, documentaries, handbooks, etc.<br>4.1.3 Publish materials. | Training package on SLM in the first year.<br>4 posters, pamphlets, technical bulletins, and training guides published in year 3 & 4. | LRPD, MoF, MoE, |
| ***Baseline :*** *Large amounts of data are in existent among different organizations but needs to be compiled into an information package that can be used by all for the promotion of SLM.* | | | | |
| **Output 4.2 :** Information management for GIS improved at divisional levels | Fully functional units in divisional offices with capable staff. | 4.2.1 Incorporate and promote new techniques into existing system. | LIS / GIS capabilities provided in divisional offices in year 2.<br>Networking among all stakeholders in year one. | LRPD,<br>MoF |
| *Baseline : Existing system setup in mid-1990's but hardware and software has not been upgraded to meet recent developments and networking upgraded to decentralize some operations at divisional level.* | | | | |
| **Output 4.3 :** Mapping, monitoring and evaluation improved. | Better planning and decision making based on thematic data. | 4.3.1 Conduct surveys to identify land uses and assess land degradation.<br>4.3.2 Produce thematic maps. | 3 District based land use, soils, land capability plans compiled annually. | LRPD, |
| ***Baseline :****Presently surveys and mapping are done for planning and development but not for SLM or Land Degradation monitoring.* | | | | |
| **Output 4.4 :** Incorporation of local and traditional management approaches into community-led integrated land use planning systems | Participatory and integrated land use planning adopted. | 4.4.1 Conduct Participatory appraisals on needs based land use<br>4.4.2 Identify alternative land uses.<br>4.4.3 Promote community based land use planning.<br>4.4.4 Integrate sectoral development plans, | 6 participatory rural appraisals of land owning units annually.<br>6 Participatory land use plans annually of individual parcels of land.<br>3 districts have integrated land use plans in the final year. | MoA, MoF, MoT, MoE, Fijian Affairs, NLTB, Lands, TCP, |
| ***Baseline :*** *Incorporation of bottom up approach with modifications to normal everyday approaches for management will bring about success to projects with community involvement .* | | | | |
| **Outcome 5: Adaptive Management & Lessons Learnt** | | | | |
| **Output 5.1 :** Monitoring & Evaluation. | Standard monitoring and reporting of SLM. | 5.1.1. Develop participatory monitoring | M & E framework in Y1 | Project Coordinator |

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|---|---|---|---|---|
| | The number of land management decisions that follow from monitoring insights<br><br>The number and nature of adaptive responses by project management and staff to insights gained through project monitoring activities<br><br>Ability of community land resource management activities to meet their locally defined purpose. | plans that address the impact, effectiveness and efficiency of land management initiatives to meet SLM project targets<br><br>5.1.2. Conduct and compile monitoring data on a 6-monthly basis<br><br>5.1.3. Document and distribute lessons learned through the project activities.<br><br>5.1.4. Hold team meetings to discuss and analyse lessons learnt for adaptive project management. | 6-monthly lessons learnt report<br><br>Y1 Report to be completed and incorporated into APR/PIR<br><br>Annual Team meeting responses documented | |
| ***Baseline :*** *Project performance monitored based on Monitoring and Evaluation kit and not just for the sake of reporting as presently done.* | | | | |
| **Output 5.2** Project Management Unit | Efficient and effective implementation of the project.<br><br>Stakeholder involvement and participation identified<br><br>National support for MSP workplan | 5.2.1 Resourcing of Project Management Unit<br><br>5.2.2 Conduct inception workshop.<br><br>5.2.3 Convene and coordinate National Coordinating Board (NCB) meetings. | Project staff recruited within the first three months of project commencement<br>Physical resources procured within the first year<br>Annual work plan and Inception report within 3 months of project commencement<br><br>NCB updated on project performance quarterly | Project Coordinator |
| ***Baseline*** *: The unit already exists within the Department of Land Resources Planning and Development with the Ministry of Agriculture who are the Secretariat to the Land Conservation Board but needs additional resources.* | | | | |

**Total Budget and Work plan**

| **AWARD ID :** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PROJECT TITLE: Capacity Building and Mainstreaming of Sustainable Land Management** | | | | | | | |
| GEF Outcome/ Atlas Activity | Responsible Party | Source of Funds | Amount US $ (Year 1) | Amount US$ (Year 2) | Amount US $ (Year 3) | Amount US$ (Year 4) | Amount US$ (Total) |
| Outcome 1 | MoA,, | GoF | 50,000 | 40,000 | 30,000 | 30,000 | 150,000 |
| | Project Coordinator | GEF | 30,000 | 30,000 | 20,000 | 20,000 | 100,000 |
| **SUB - TOTAL** | | | **80,000** | **70,000** | **50,000** | **50,000** | **250,000** |
| Outcome 2 | MoA,, | GoF | 110,000 | 110,000 | 100,000 | 97,477 | 417,477 |
| | Project Coordinator | GEF | 70,000 | 80,000 | 60,000 | 50,000 | 260,000 |
| **SUB - TOTAL** | | | **180,000** | **190,000** | **160,000** | **147,477** | **677,477** |
| Outcome 3 | MoA,, | GoF | 5,000 | 7,000 | 8,000 | 10,000 | 30,000 |
| | Project Coordinator | GEF | 10,000 | 10,000 | 10,000 | 10,000 | 40,000 |
| **SUB - TOTAL** | | | **15,000** | **17,000** | **18,000** | **20,000** | **70,000** |
| Outcome 4 | MoA,, | GoF | 20,000 | 30,000 | 30,000 | 20,000 | 92,000 |
| | Project Coordinator | GEF | 5,000 | 10,000 | 8,000 | 12,000 | 35,000 |
| **SUB - TOTAL** | | | **25,000** | **40,000** | **38,000** | **32,000** | **127,000** |
| Outcome 5 | MoA,, | GoF | 2,000 | 2,000 | 2,000 | 2,000 | 8,000 |
| | Project Coordinator | GEF | 5,000 | 10,000 | 5,000 | 20,000 | 40,000 |
| **SUB - TOTAL** | | | **7,000** | **12,000** | **7,000** | **22,000** | **48,000** |
| **TOTAL MSP** | | | **307,000** | **329,000** | **273,000** | **271,477** | **1,172,477** |
| **GEF PDF-A** | | | | | | | **25,000** |
| **GRAND TOTAL** | | | | | | | **1,197,477** |

**Total budget and workplan with budgetary notes.**

| **Award ID: 00038423** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Award Title: PIMS 3396 Capacity Building and Mainstreaming of Sustainable Land Management in Fiji** | | | | | | | | | | | |
| **Business Unit: FJI10** | | | | | | | | | | | |
| **Project Title: Capacity Building and Mainstreaming of Sustainable Land Management in Fiji** | | | | | | | | | | | |
| **Executing Agency: Department of Land Resource Planning (LRPD), Ministry of Agriculture & Primary Industries** | | | | | | | | | | | |
| **GEF Outcome/Atlas Activity** | **Responsible Party (Implementing Partner)** | **Fund ID** | **Source of Funds** | **Atlas Budgetary Account Code** | **ERP/ATLAS Budget Description/Input** | **Amount (USD) Year 1** | **Amount (USD) Year 2** | **Amount (USD) Year 3** | **Amount (USD) Year 4** | **Total (USD)** | **See Budget Note:** |
| **OUTCOME 1: Increased Knowledge and Awareness on SLM** | **LRPD, MoA** | 62000 | GEF | 71400 | Contractual Services | 5,000 | 5,000 | 5,000 | 5,000 | 20,000 | **a** |
| | | | | 72500 | Office Supplies | 3,000 | 3,000 | 2,000 | 2,000 | 10,000 | **b** |
| | | | | 72200 | Equipment | 8,000 | 4,000 | 2,000 | 2,000 | 16,000 | **c** |
| | | | | 72300 | Materials and Goods | 4,000 | 4,000 | 2,000 | 2,000 | 12,000 | **d** |
| | | | | 71600 | Travel & subsistence | 5,000 | 6,000 | 3,000 | 3,000 | 17,000 | **e** |
| | | | | 74200 | Printing & Publication | 2,000 | 4,000 | 5,000 | 5,000 | 16,000 | **f** |
| | | | | 74500 | Miscellaneous | 2,000 | 2,000 | 500 | 500 | 5,000 | **g** |
| | | | | 72400 | Communications | 1,000 | 2,000 | 500 | 500 | 4,000 | **h** |
| | | | | | **Total Outcome 1** | **30,000** | **30,000** | **20,000** | **20,000** | **100,000** | |
| **OUTCOME 2: Individual and institutional capacities developed** | **LRPD, MoA** | 62000 | GEF | 71400 | Contractual Services | 5,000 | 5,000 | 5,000 | 5,000 | 20,000 | |
| | | | | 71200 | International Consultants | 0 | 7,500 | 7,500 | 0 | 15,000 | **i** |
| | | | | 72500 | Office Supplies | 4,000 | 4,000 | 4,000 | 4,500 | 16,500 | |
| | | | | 72200 | Equipment | 30,000 | 35,000 | 10,000 | 0 | 75,000 | |
| | | | | 72300 | Materials and Goods | 10,000 | 2,000 | 5,000 | 5,000 | 22,000 | |
| | | | | 71600 | Travel | 10,000 | 11,000 | 14,700 | 15,000 | 50,700 | **j** |
| | | | | 74500 | Miscellaneous | 6,000 | 8,500 | 9,800 | 10,500 | 34,800 | **k** |
| | | | | 72400 | Communications | 2,000 | 2,000 | 1,000 | 2,000 | 7,000 | |
| | | | | 74200 | Printing & Publication | 3,000 | 5,000 | 3,000 | 8,000 | 19,000 | |
| | | | | | **Total Outcome 2** | **70,000** | **80,000** | **60,000** | **50,000** | **260,000** | |
| **OUTCOME 3 : Mainstreaming and harmonization of SLM** | **LRPD, MoA** | 62000 | GEF | 72500 | Office Supplies | 1,000 | 500 | 1,000 | 500 | 3,000 | |
| | | | | 71400 | Contractual Services | 4,000 | 5,000 | 5,000 | 6,500 | 20,500 | |
| | | | | 72400 | Communications | 2,000 | 1,000 | 500 | 500 | 4,000 | |
| | | | | 71600 | Travel | 2,500 | 3,000 | 3,000 | 2,000 | 10,500 | |
| | | | | 74500 | Miscellaneous | 500 | 500 | 500 | 500 | 2,000 | |
| | | | | | **Total Outcome 3** | **10,000** | **10,000** | **10,000** | **10,000** | **40,000** | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **OUTCOME 4: Technical Support and on the ground investment.** | **LRPD, MoA** | 62000 | GEF | 71400 | Contractual Services | 0 | 2,500 | 4,000 | 3,000 | 9,500 | |
| | | | | 71300 | Local Consultants | 2,500 | 2,500 | 1,500 | 3,000 | 9,500 | |
| | | | | 72300 | Office Supplies | 500 | 500 | 200 | 1,000 | 2,200 | |
| | | | | 72300 | Materials and Goods | 500 | 500 | 0 | 1,000 | 2,000 | |
| | | | | 71600 | Travel | 1,000 | 2,000 | 1,000 | 2,000 | 6,000 | |
| | | | | 74200 | Printing & Publication | 400 | 1,500 | 1,000 | 1,500 | 4,400 | |
| | | | | 74500 | Miscellaneous | 100 | 500 | 300 | 500 | 1,400 | |
| | | | | | **Total Outcome 4** | **5,000** | **10,000** | **8,000** | **12,000** | **35,000** | |
| **Outcome 5: Adaptive Management & Lessons Learnt** | | | | 72300 | Office Supplies | 500 | 500 | 500 | 1,000 | 2,500 | |
| | | | | 71400 | Contractual Services | 3,000 | 6,000 | 2,000 | 10,000 | 21,000 | |
| | | | | 72300 | Communications | 300 | 300 | 200 | 500 | 1,300 | |
| | | | | 72400 | Travel & subsistence | 1,000 | 2,000 | 1,500 | 3,000 | 7,500 | |
| | | | | 74200 | Printing & Publication | 0 | 1,000 | 600 | 5,000 | 6,600 | |
| | | | | 74500 | Miscellaneous | 200 | 200 | 200 | 500 | 1,100 | |
| | | | | | **Total Outcome 5** | **5,000** | **10,000** | **5,000** | **20,000** | **40,000** | |
| | | | | | **PROJECT TOTAL (MSP)** | **$120,000** | **140,000** | **$103,000** | **$112,000** | **$475,000** | |

| **Summary of Funds:** | |
|---|---|
| **GEF (PDF-A{(25,000) + MSP (475000)}** | **$500,000** |
| **Government of FIJI (Inkind/Cash)** | **697,477** |
| **Project Total** | **$1,197,477** |

## Budgetary notes:

**a.** Local Project staff recruited for the entire project from time to time
**b.** Purchase of stationeries and computer consumables for the project
**c.** This involves the purchase of major physical resources for the project
**d.** This is for the purchase of minor goods and services of existing equipments used for the project
**e.** Travels for transportation and movement during the project period for stakeholders and project staff
**f.** Printing and publication of reports and awareness materials
**g.** Contingency funds which will be utilized wherever the need arises
**h.** Local and overseas communications (telephones, fax, emails and postage charges)
**i.** Recruitment or hiring of specialized short term regional or international consultants
**j.** This includes travel for local consultants as well as travel for workshops, transportation costs for awareness/training programmes, engaging in the land use planning and management community of practice (meetings and seminars national participation in regional and sub-regional dedicated training, consulting key institutions on SLM practices and holding stakeholder consultations in different states.
**k.** This includes materials for the workshops and contingency and costs for tertiary trainings for staff and local workshops, meetings and seminars (workshop facilities and costs)

## Detailed Activity Budget

| **Outcome 1: Increased knowledge and awareness on SLM** | **Year** | | | | **Responsibility** | **Budget Description** | **GEF** | **Co-Financing** | **TOTAL (US$)** |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | | | | |
| ***Output 1.1** : Generation and improvement of information systems for SLM* | | | | | | | | | |
| 1.1.1 Generate resource information databases. | x | x | x | x | MoA, MoF | Project staff, Data collection and digital capture | 10,000 | 30,000 | 40,000 |
| 1.1.2 Develop training modules on sustainable farming systems. | x | x | | | MoA | Data collection & module development & publication | 4,000 | 4,000 | 8,000 |
| 1.1.3 GIS hardware and software upgraded. | x | x | x | x | MoA, MoF | Hardware & software purchases | 8,000 | 5,000 | 13,000 |
| 1.1.4 Data acquisition and conversion | x | x | x | | MoA | Data costs | 3,000 | 2,000 | 5,000 |
| 1.1.5 Conduct pilot land degradation assessment surveys | | x | x | x | MoA, MoF | Materials, traveling & subsistence, soil analysis | 7,000 | 4,000 | 11,000 |
| 1.1.6 Facilitate resource information centers for SLM | | | x | x | Divisional heads (Ext.) | Computer, information travel & administration costs | 5,000 | 3,000 | 8,000 |
| 1.1.7 Create district and provincial networks | | | x | x | Provincial Administrators | Consultations, meetings & traveling, catering | 3,000 | 2,000 | 5,000 |
| ***Output 1.1 Sub-Total*** | | | | | | | **40,000** | **50,000** | **90,000** |
| ***Output 1.2 :** Community awareness on SLM technologies* | | | | | | | | | |
| 1.2.1 Training and awareness on SLM | x | x | x | x | MoA, MoF, NGO's | Training costs | 10,000 | 10,000 | 20,000 |
| 1.2.2 Establish demonstration farms in localities. | x | x | x | x | MoA, MoF, NGO's | Vehicle, Project staff, subsistence & materials | 35,000 | 60,000 | 95,000 |
| 1.2.3 Production and dissemination of awareness materials | | | x | x | MoA, MoF, MoE, NGO's | Compilation & publication costs | 15,000 | 20,000 | 35,000 |
| ***Output 1.2 Sub-Total*** | | | | | | | **60,000** | **90,000** | **150,000** |
| **Total Outcome 1** | | | | | | | **100,000** | **140,000** | **240,000** |
| **Outcome 2: Individual and institutional capacities developed** | | | | | | | | | |
| ***Output 2.1:** National stakeholders' trainings & workshops.* | | | | | | | | | |
| 2.1.1 Conduct workshops for related stakeholders. | x | x | x | x | MoA, MoF | Workshop costs, Resource persons | 20,000 | 64,000 | 84,000 |
| 2.1.2 Conduct trainings land capability and land use planning for different uses of land. | | x | x | x | MoA, MoF, TCP, NLTB | Resource persons, materials, catering, field surveys | 10,000 | 40,000 | 50,000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2.1.3 Setup interagency working group for SLM. | | | x | x | Steering Committee | Meetings, discussions, papers | 5,000 | 10,000 | 15,000 |
| 2.1.4 Conduct trainings on technology transfer | x | x | x | x | MoA, MoF, NGO's | Vehicle, Project staff, planting materials, equipments | 40,000 | 70,000 | 110,000 |
| 2.1.5 Formalize trainings of resource persons. | | x | x | x | MoA, MoF, NLTB, Lands | Fellowships to training institutions | 60,000 | - | 60,000 |
| ***Output 2.1 Sub-Total*** | | | | | | | **135,000** | **184.000** | **319,000** |
| ***Output 2.2:*** *Participation in national environmental events.* | | | | | | | | | |
| 2.2.1 Produce leaflets, posters and display materials on SLM. | x | x | | | Project coordinator with all stakeholders | Production costs, printing | 15,000 | 35,000 | 50,000 |
| 2.2.2 Upgrade display materials | | x | x | | | Boards, Charts, models | 10,000 | 10,000 | 20,000 |
| 2.2.3 Plan and organize multimedia presentations. | | | x | x | | Preparations for Radio, TV, Newspapers, Computer | 5,000 | 22,477 | 27,477 |
| ***Output 2.2 Sub-Total*** | | | | | | | **30,000** | **67,477** | **97,477** |
| ***Output 2.3:*** *SLM related policies and legislations strengthened.* | | | | | | | | | |
| 2.3.1 Review and develop policy briefs and strategies for the promotion. | | x | x | | Project Coordinator | Local Consultant, travel, subsistence, workshop costs | 7,000 | 30,000 | 37,000 |
| 2.3.2 Land tenure and land use legislations amended for policy enforcement. | | | x | x | Attorney General | Legal Officer, consultations, drafts | 3,000 | 20,000 | 23,000 |
| ***Output 2.3 Sub-Total*** | | | | | | | **10,000** | **50,000** | **60,000** |
| ***Output 2.4:*** *Skilled community based facilitators available.* | | | | | | | | | |
| 2.4.1 Train community based facilitators. | | x | x | | MoA, MoF, MoE, NGO's | Vehicle, Local Consultant, subsistence & training costs | 40,000 | 40,000 | 80,000 |
| 2.4.2 Facilitate networking among collaborators and communities. | | | x | x | Project Coordinator | Meetings, consultations,computers, materials | 10,000 | 10,000 | 20,000 |
| 2.4.3 Orgainze workshops, seminars, etc. | x | x | x | x | MoA, MoF, NGO's | Accommodation, meals, materials | 16,000 | 30,000 | 46,000 |
| 2.4.4 Develop tools, manuals, guidelines | x | x | | | | Collection, typesetting, printing, publishing | 10,000 | 10,000 | 20,000 |
| 2.4.5 Develop partnerships based on Land care concept | | x | x | x | MoA, MoF, Provincial Admin. | Workshops on public- private partnerships. | 9,000 | 10,000 | 19,000 |
| ***Output 2.4 Sub-Total*** | | | | | | | **85,000** | **100,000** | **190,000** |
| **Total Outcome 2** | | | | | | | **260,000** | **401,477** | **661,477** |
| **Outcome 3 : Mainstreaming of SLM/NAP** | | | | | | | | | |
| ***Output 3.1:*** *NAP prepared and elaborated to identify on-the-ground investments.* | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 3.1.1 Finalization of the NAP. | x | | | | UNCCD Secretariat | Revision of draft NAP | - | 1,000 | 1,000 |
| 3.1.2 Government endorsement and adoption of NAP | | x | | | | Presentations to MP's, Ministers, Cabinet, Paper to cabinet | 500 | 1,000 | 1,500 |
| 3.1.3 NAP published and circulated for awareness. | | x | x | | | Publishing costs | 3,500 | 5,000 | 8,500 |
| 3.1.4 Workshops on stakeholder contribution towards NAP implementation. | | | x | x | | Workshops costs | 6,000 | 3,000 | 9,000 |
| ***Output 3.1 Sub-Total*** | | | | | | | **10,000** | **10,000** | **20,000** |
| ***Output 3.2 :*** *Mainstreaming of SLM* | | | | | | | | | |
| 3.2.1 Integrate SLM into agriculture, forestry tourism, urban and rural development policies and plans. | | x | x | x | MoF&NP, MoA, MoF, MoT, TCP, Lands, NLTB, Legal Officers | Consultant, Workshops, materials | 7,000 | 5,000 | 12,000 |
| 3.2.2 Legislations reviewed and SLM components incorporated. | | | x | x | | Workshops, Copies of Laws, | 3,000 | 5,000 | 8,000 |
| ***Output 3.2 Sub-Total*** | | | | | | | **10,000** | **10,000** | **20,000** |
| ***Output 3.3;*** *SLM investment plan incorporated into NSDP* | | | | | | | | | |
| 3.3.1 Identify priority SLM issues and needs for all sectors. | | | x | x | Project Coordinator | Sectoral and inter sectoral workshops, meetings | 5,000 | 5,000 | 10,000 |
| 3.3.2 Develop proposals for SLM development projects. | | | | x | MoA, MoF, Consultant | Consultants, Locals, consultations, proposals | 12,000 | 3,000 | 15,000 |
| 3.3.3 Continuous sourcing of SLM investments from donors and government | | | | x | Stakeholders , MoF&NP, | Consultant, Project planning courses, workshops. | 3,000 | 2,000 | 5,000 |
| ***Output 3.3 Sub-Total*** | | | | | | | **20,000** | **10,000** | **30,000** |
| **Total Outcome 3** | | | | | | | **40,000** | **30,000** | **70,000** |
| **Outcome 4 : Technical support for SLM planning** | | | | | | | | | |
| ***Output 4.1:*** *Training and awareness materials produced.* | | | | | | | | | |
| 4.1.1 Compile and organize promotional materials. | x | x | x | x | MoA, MoF | Consultations, Travel, Subsistence | 500 | 3,000 | 3,500 |
| 4.1.2 Design pamphlets, leaflets, documentaries, handbooks, etc. | | x | x | x | MoA, MoF | Contract, materials | 1,000 | 2,000 | 3,000 |
| 4.1.3 Publish materials. | | | x | x | MoA | Contract | 3,500 | 5,000 | 8,500 |
| ***Output 4.1 Sub-Total*** | | | | | | | **5,000** | **10,000** | **15,000** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Output 4.2 :*** *SLM knowledge sharing improved* | | | | | | | | | |
| 4.2.1 Incorporate and promote new techniques into existing materials. | | | x | x | MoA | Applications development, programs | 5,000 | 5,000 | 10,000 |
| ***Output 4.2 Sub-Total*** | | | | | | | **5,000** | **5,000** | **10,000** |
| ***Output 4.3 :*** *Mapping, monitoring and evaluation improved.* | | | | | | | | | |
| 4.3.1 Conduct surveys to identify land uses and assess land degradation. | | x | x | x | MoA, Lands, NLTB | | 5,000 | 20,000 | 25,000 |
| 4.3.2 Produce thematic maps. | | | x | x | MoA, MoF, TCP, Lands, NLTB, | | 2,000 | 13,000 | 15,000 |
| 4.3.3 Develop a system for monitoring of agricultural sustainability. | x | x | | | MoA, Lands,NLTB | | 1,000 | 4,000 | 5,000 |
| ***Output 4.3 Sub-Total*** | | | | | | | **8,000** | **37,000** | **45,000** |
| ***Output 4.3 :*** *Community based participatory planning adopted.* | | | | | | | | | |
| 4.4.1 Conduct Participatory appraisals on needs based land use | x | x | x | | MoA, MoF, MoT, TCP | PRA workshops | 5,000 | 15,000 | 20,000 |
| 4.4.2 Identify alternative land uses. | | x | x | | | Identification & consultations, meetings | 2,000 | 5,000 | 7,000 |
| 4.4.3 Promote community based land use planning. | | | x | x | | Workshops, materials | 5,000 | 10,000 | 15,000 |
| 4.4.4 Integrate sectoral development plans, | | | | x | | Computer consumables, data | 5,000 | 10,000 | 15,000 |
| ***Output 4.3 Sub-Total*** | | | | | | | **17,000** | **40,000** | **57,000** |
| **Total Outcome 4** | | | | | | | **35,000** | **92,000** | **127,000** |
| **Outcome 5 : Adaptive Management and Lessons Learnt** | | | | | | | | | |
| ***Output 5.1:*** *Monitoring and Evaluation* | | | | | | | | | |
| 5.1.1. Develop participatory monitoring based on the Resource Kit | * | | | | **Project Team** Project coordinator UNDP country office National Coordinating Body | Workshop, stationeries, per-diums, travelling | 8000 | 500 | **8500** |
| 5.1.2. Conduct and compile monitoring data on a 6-monthly basis | * | * | * | * | | Traveling, subsistence, stationeries | 10000 | 2000 | **12000** |
| 5.1.3 Document and distribute lessons learned through the project activities | | * | * | * | | Publications, communications | 5000 | | **5000** |
| 5.1.4 Hold team meetings to discuss lessons learnt | | * | * | * | | Travelling, meeting costs | 4000 | 1500 | **5500** |
| ***Output 5.1 Sub-Total*** | | | | | | | **27000** | **4000** | **31000** |
| **Output 5.2:** *Project Management Unit* | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 5.2.1 Resourcing of PMU | * | | | | Project Coordinator | Management staff, Communication, stationeries | 1000 | 26,000 | **27000** |
| 5.2.2 Conduct inception workshop | * | | | | | Consultant, Workshop, stationeries, traveling, perdiums | 8000 | 2000 | **10000** |
| 5.2.3 Convene and coordinate NCB meetings | * | * | * | * | | Meeting costs | 2000 | 2000 | **4000** |
| 5.2.4 Miscellaneous | | | | | | Traditional offering (sevusevu), communication, stationeries | 2000 | | **2000** |
| ***Output 5.2 Sub-Total*** | | | | | | | **13000** | **30000** | **43000** |
| **Total Outcome 5** | | | | | | | **40,000** | **34,000** | **74,000** |
| **PROJECT TOTAL** | | | | | | | **475,000** | **697,477** | **1,172,477** |
| **PDF-A** | | | | | | | **25,000** | **-** | **25,000** |
| **GRAND TOTAL** | | | | | | | **500,000** | **697,477** | **1,197,477** |

## SECTION 111: ADITIONAL INFORMATION

### PART 1: GEF Operational Focal Point Endorsement Letter

### CCD National Focal Point Endorsement Letter

### National Coordinating Body Recommendation Letter

### PART II: Co-Financing Letter

### PART III: DETAILED INFORMATION

### (a) The Composition and Functions of the National Coordinating Body (Land Conservation Board)

The provisions in the Land Conservation and Improvement Act (Section 3) stipulate the setting up of the Land Conservation Board with the following 9 members:-

1. Chief Executive Officer for MoA - Chairman
2. Chief Executive Officer for Works - Member
3. Chief Executive Officer for Lands - Member
4. Conservator of Forests - Member

*5 other members not holding an office of Emolument under the State.*

5. General Manager – NLTB - Member
6. General Manager Field Services – FSC - Member
7. Farmers Representative – Northern - Member
8. Farmers Representative – Western - Member
9. Farmers Representative – Central - Member

The functions of the Board shall be

(a) to exercise general supervision over land and water resources;
(b) to stimulate, by propaganda and any such other means as it may deem expedient, public interest in the conservation and improvement of land and water resources;
(c) to recommend to the Minister the nature of legislation by it deemed necessary for the proper conservation and improvement of land and water resources;
(d) to make general or particular conservation, closing orders or orders to do work for the conservation of land and water resources.

The Land Conservation Board has been in existence since 1953 and the powers conferred on the board by the Act are sufficient to allow the Board to make sufficient contribution to land conservation in Fiji. Apart from a few isolated land conservation cases, it seems to be concentrating on drainage and irrigation activities. The Board Members do not seem to be always conferring with their respective Ministers informing them of their actions on the above

functions and enlisting their support and ensuring support for their respective Committee Members.

Presently the Secretariat to Land Conservation Board lies with the Land Use Section of the Department of Land Resources Planning and Development, MASLR. This is the right place for it since functions of the Board are also incorporated in the Section's strategic Plan, which is as follows:

*Key Performance Area:* LAND RESOURCE DEVELOPMENT & MANAGEMENT

*Goal:* EFFECTIVE MANAGEMENT OF LAND RESOURCES TO ENSURE SUSTAINABLE DEVELOPMENT

*Policy Goals:* TO ENSURE SOUND LAND MANAGEMENT AND DEVELOPMENT.

TO ENSURE SUSTAINABLE UTILIZATION AND DEVELOPMENT OF LAND.

**Objectives (LAND USE SECTION):**

Provision of quality and timely advice

Accelerating the generation and use of appropriate and innovative technology

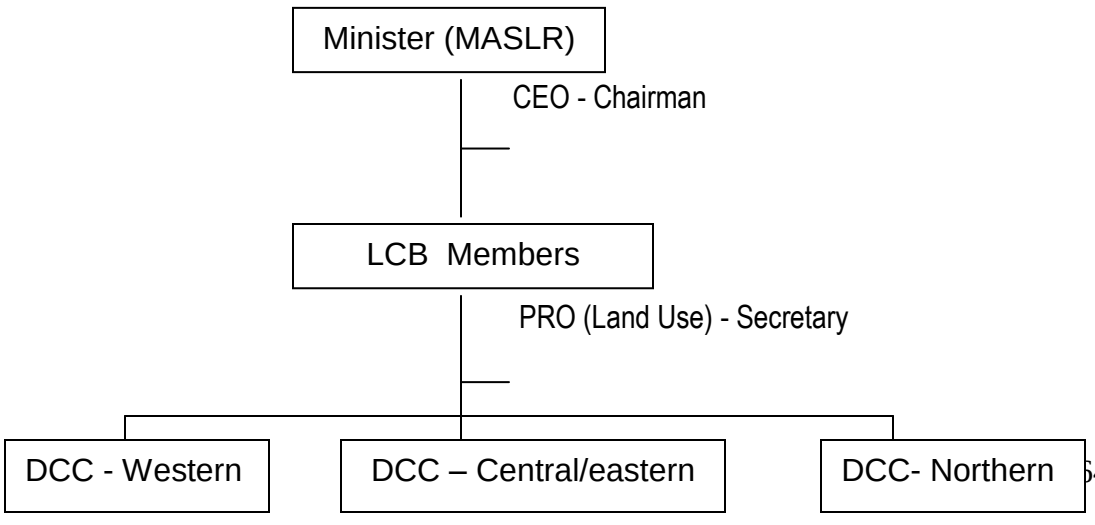
Ensuring sustainable land and management practices

The provision of sound corporate management structures and systems

Maintaining an effective, dynamic and customer focused organization.

Provisions for the appointment of Conservation Committees in different areas is required under Section 6(1) of the Act, but has not been acted upon by the Land Conservation Board. However, in1993 when the Secretariat was transferred to the Land Use Section, its Western Division office initiated the formation of Western Division Conservation Committee.

The Western Division Conservation Committee was active until 1998 under the Chairmanship of the then Commissioner, Jeremaia Waqanisau. Although appointed as Chairman, the Commissioners following were not as keen and so the Committee was inactive since then. However, the term of the present Committee Members and Chairman expired in February 2003 and the Secretariat is working towards their renewals and activating the Committee once again. The other two Divisional offices of the Land Use Section are also working towards the formation of Northern and Central/Eastern Conservation Committees.



## (b) Draft National Action Program Framework

| Policy Objectives | Strategies | Activities | Key Performance Indicators | Organisations Responsible |
|---|---|---|---|---|
| 1.0 Protection of water and soil values | 1.1. Compilation of national soil inventory | 1.1.1 Conduct the Soil Inventory Survey of all district in Fiji | Soil inventory of Fiji Completed by 2010 | Ministry of Agriculture |
| | | 1.1.2 Digital capturing of surveyed information into spatial & attribute database | | |
| | 1.2. Produce a National Land Use inventory of Fiji | 1.2.1 Field survey and mapping of present land use<br>1.2.2 Digital capturing of surveyed information into spatial & attribute database | National Present Land use inventory updated every five years. | Ministry of Agriculture<br><br>Forestry |
| | 1.3 Monitor and Evaluate the status of land degradation in Fiji. | 1.3.1Conduct the Land Degradation Assessment of all District in Fiji | Updated report and maps produced every five years | Ministry of Agriculture<br>Forestry<br>Environment<br>NGO'S<br>USP |
| | 1.4. GIS modeling on Water and Soil Parameters for impact assessments. | 1.4.1 Acquire and compile climate, soils and plant information. | Land Suitability & Erosion prediction model for Fiji | Ministry of Agriculture<br>Meteorology<br>Forestry |
| 2.0 Increase public awareness that; Land Resources including soil, water and flora are interdependent and must be sustainably managed in an integrated way | 2.1. Public awareness on the sustainable uses of land and water resources. | 2.1.1 Conduct awareness program on the sustainable use of land and water resources in all Districts of Fiji's 14 Provinces. | - 187 training carried out in the 187 Districts by 2009. | NLTB, Ministries of; Agriculture, Education, Forestry, Environment, Finance and National Planning, Provincial Development, Lands and Surveys, Town and Country Planning, FAB, Relevant NGO's , Fiji Hardwood Corporation, Fijian Affairs, Women |
| | 2.2.Develop appropriate education and awareness programs for sustainable land based resources management. | 2.2.1 Develop teaching material on SLM | -Low cost sustainable land management technologies adopted. | |
| | 2.3 Development of low cost appropriate SLM technologies | 2.3.1 Transfer of SLM technologies<br><br>24.1. Adoption of | Number of Demonstration and Conservation farms established<br>Adoption of sound | |

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| | 2.4 Increased Public awareness of the values of trees and forests | sound land use practices.<br>24.2 Educational curriculum to include trees and forestry subjects.<br>24.3 Develop strategic guideline for public access to indigenous forests | land use practices<br><br>All schools to include tree and forestry subjects in their curriculum | |
| 3.0. The individual land user and community have responsibility for preventing and or mitigating land degradation. | 3.1. Participatory District Based Land Use planning.<br><br>3.2 Development and Implementation of Participatory Tikina Based Land Use Plan<br><br>3.3 Identification and training of Landcare facilitators.<br><br>3.4. Promotion of Land Care concept | 3.1.1.Development and implementation of Participatory Tikina Based Land Use Plan.<br>3.2.1 Carry out participatory Tikina Based Land Use Survey<br><br>3.3.1 Identification and training of Landcare facilitators<br><br>3.4.1 Formulation of Landcare Groups | -development and implementation of 187 Tikina Based Land Use Plans<br><br>187 Tikina Based Land Use Plans for the development of the National Land Use Plan.<br><br>187 Landcare facilitators fully trained.<br><br>Number of Land Care Groups formed | Ministry of Agriculture Provincial Development |
| 4.0 A regulatory framework for the protection and sustainable development and management of rural land resources | 4.1.The indigenous forests will be protected and managed for their biodiversity, conservation and production values by adopting SFM principles.<br>4.2 Protection of the environment and management of water, land, forestry and other natural resources will be conducted in an ecologically sustainable | 4.1.1 Implement the NBASP<br><br>4.1.2. Review and Amend the Forestry Act.<br><br>4.1.3.Develop a Forestry Policy<br><br>4.2.1 Review and Amend the LCIA<br><br>4.2.2 Develop a Land Use Agriculture Policy<br><br>4.2.3 Develop a Tourism Policy | NBASP implemented<br><br>Forestry Act reviewed<br><br>Forestry Policy developed<br><br>LCIA amended<br><br>Agriculture Landuse Policy developed<br><br>Tourism Policy developed | Dept. of Environment, Ministry of Fisheries and Forests, Ministry of Finance and NPO, Agriculture Dept., NLTB, FAB,Ministry of Provincial Development, Dept.of Mineral Resources, Lands Dept.,Relevant NGO's.<br>Ministry of Tourism. |
| 5.0 The plantation forests must be managed and | 5.1 Implement the principles of Sustainable | 5.1.1 Develop and established demo sites for SFM | Demo sites established. | Forestry Dept. Fiji Pine Ltd, NLTB, Fiji Harwood |

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| administered in a manner that sustains site quality. | Forestry Management( SFM) | technologies | | Corporation, National Trust of Fiji Dept. of Environment. Relevant NGO's, Min. Fijian Affairs |
| 6.0 An effective involvement with and contribution to global issues and laws related to the environment, rural development, sustainable land management, etc. | 6.1 Facilitating participation on regional, sub-regional and international co-operation. | 6.1.1 Implementing the conventions concerning environment and sustainable development. 6.1.2 Strengthening the exchange of information and expertise. | National Action Plan Developed for UNCCD, UNFCC, UNCBD, Increased linkages & accessibility to international and regional website | Ministry of Agriculture Forestry Environment |
| 7.0 Develop a strategy for drought mitigation and early warning systems. | 7.1 Increase awareness in disaster mitigation | 7.1.1 Increase awareness, preparedness and response plan. 7.1.2 Improve climatic monitoring system | Disaster Management Act reviewed Response Plan | Ministry of Environment, MASLR, P.W.D, Meteorology, Ministry of Health, Provincial Development |

### c) Some Previous Studies

Previous studies and reports provide an insight to the information that is available to planners and decision-makers and are of direct relevance to the objectives of the proposal. Analysis of these reports and maps demonstrates the wealth of knowledge available about the natural resources of Fiji, the rural land use issues, problem and their causes. Most previous studies include recommendations that are of equal relevance today. They answer many of the basic questions about land use and soil conservation in Fiji such as what the problems are, where they occur, why there are problems are, where they occur, why there are problems, how to treat them and the institutional and human resource needs to facilitate change.

Following the introduction of Land Conservation & Improvement Act in 1953, the emphasis was on the legislative control on use and management of land. An indication of this was the use of Section 7 of the Ordinance where Soil Conservation Orders were issued on the use of sledges in farming operations and in 1959 provisions for Orders to prohibit, regulate and control the lighting of fires and burning of vegetation was made to Section 7 of the LCIA. Section 7 was also utilised to proclaim Conservation Orders prohibiting the planting of sugar cane across the general slope of the land. This regulatory procedure of contour planting appeared to be successful because of the support from the company and its extension programmes then.

Section 8 of the Ordinance provides for the issuing of Closing Orders for declaration of "Closed Areas". A number of such Orders were issued for areas that had suffered extreme damage from poor/bad land use.

This period saw the creation of Soil Conservation Unit within the Department of Agriculture. It was equipped with bulldozers and graders to carry out soil conservation work on hire service to land holders. Because of landholders demands and shortage of private contractors,

plant hire was extended to cover farmers needs such as roading, rice bunds, etc., and this eventually predominated over conservation works.

From 1961 onwards the Soil Conservation Officer, B. Marsh concentrated mainly on the development of land according to its capability to ensure long-term land conservation in Fiji. His assessment of the situation was that the erosion problem that existed was not the poor management practices but the type of land use and kind of production attempted. He initiated the setting up of Land Use Section to carry out land evaluation studies of proposed developments, to assess the land capability within the restraints necessary for land conservation and to recommend land subdivisions according to its capabilities. Mr B. Marsh departed in 1966 and the Land Use Section was transferred from one division to another, from Extension to Research then to Economics, planning & Statistics then back to Research and finally is with the Department of Land Resources Planning & Development. Despite its terms of reference and functions remaining the same, in operation the section's activities are far from those of the Soil Conservation Unit.

A Land Conservation Board has been in existence since 1953, apart from the break from 1966 – 1971. The Board was reconstituted in 1972 and until 1993 when the secretariat was transferred to Land Use; its primary functions were the provision of certain functions in the Drainage Ordinance, which were mainly drainage of lands, especially for cane. The Drainage & Irrigation Division officers handled administrative matters of the board with emphasis on drainage and the powers/functions of the Board did not seem to be fully appreciated. In 1993 the secretariat to the Land Conservation Board was transferred to the Land Use Section and has stayed there till today.

Some of the important historical milestones related to it are:-

1953 – Establishment of the Land Conservation Board.

1953 – Appointment of Soil Conservation Officer (G.E.Whitehead)

During this period there was an emphasis on legislative control of land use and management.

1957 – Soil Conservation Unit within Department of Agriculture established and equipped to carry out conservation works on landholders' properties.

1961 – B.Marsh replaced Whitehead. Advocated for planned development of land according to its capability.

1963 – Land Use Section established in the Extension Division of the Ministry. The primary role was to carry out land evaluation assessments of proposed development areas.

1966 – Departure of B.Marsh and transfer of Land Use Section to Research Division.

1968 – Land Use Section transferred to Economics, Planning & Statistics Division.

1969 – G. Lewis appointed as Soil Conservation Officer and stationed in Lautoka. The emphasis was on the construction of banks on steep land cultivation areas.

1972 – Land Conservation Board reconstituted after a lapse of six (6) years with additional responsibilities of the Drainage Ordinance.

1973 – Land Conservation Unit transferred to Drainage & Irrigation Division and the Soil Conservation Officer's post localised.

1974 – Australian funded report Land Conservation in Fiji by Galletly & Swartz to assess and recommend soil erosion and land degradation problems, determine factors contributing to the problems and recommend techniques of amelioration, review legislation, statutory responsibilities and institutional requirements for implementation.

1976 – Formation of the Land Development Committee under the Department of Town & Country Planning with the TOR as "to identify lands that can be made available for development and promote a programme for the co-ordinated release of land for achievement of consistency and continuity of economic, social and physical planning in Fiji.

1976 – S.D. Clark prepared the Draft Legislation on Water and Related Land Resources Management Bill. The Bill was not passed but had widespread public service support to pursue an active and effective watershed management strategy for Fiji.

1978 – Establishment of National Land Classification Study Committee to locate and quantify the three major land use classes (urban and associated, agricultural and potential agricultural or forestry and unsuitable agrarian lands in Fiji.

1982 – Western Division Land Use Co-ordinating Committee formed to identify and endeavour to find solutions for land use problems.

1983 – R.C.Dixie's Report on Fiji's Land and Water Resource Legislation, Organisation and Administration as it affects the Management and Use of the Water and Related Resources. The purpose was to investigate and make recommendations on the feasibility for modernising the administration, organisation and technical capabilities within the Land Use Section.

1986 – Sustaining Fiji's Development by R.Prescott-Allen. A project proposal for developing a National Conservation Strategy for Fiji.

1987 – W.Clarke and R.J.Morrison prepare a paper describing and explaining the current soil conservation situation in Fiji.

1987 – Watershed Management Study: Land Conservation in the Rewa and Ba Watersheds by FAO's D. Nelson with the purpose to identify the watershed problems and suggest remedies for them.

1987 – Watershed Management Study on Fiji by S. Clark proposed strengthening of the Land Conservation Board making it the most appropriate agency of Government for the enforcement, conservation and preservation of the nation's land resources.

1989 – J.D. Clark under ADB funded project was required to review present and proposed legislation pertaining to land and water conservation and recommend institutional changes required.

1992 – Environment: Fiji. The National State of the Environment Report by D.Watling and S.P. Chape describes the laws as lack of enforcement of regulations through inadequate staffing, lack of technical resources and funding, or through administrative failures.

1993 - The National Environment Strategy: Fiji by D.Watling and S.P.Chape. Among other recommendations, the urgent need for effective land and water resources management legislation, strengthening the Land Conservation Board to revitalise its soil conservation management and an authoritative land use plan based on land capability prepared.

1993 – Land Use Section transferred to the Research Division and LCB Secretariat given to them.

1994 – Formation of the Western Division Conservation Committee.

1998 – Proposed Sustainable Development Bill to provide effective and coordinated decision making on sustainable development planning, policies and implementation programmes.

1999 – Integrated Catchment Management in Fiji by L. Mudgway recommends institutional and planning strengthening for the LCB and the Land Use Section to address land conservation and management on the catchment basis.

2000 – Land Use Section transferred to Department of Land Resources Planning & Development.

**(d) Overview of Some Sound Land Husbandry Provisions in Fiji**

Clearly Agricultural Landlord and Tenant Act and related legislations provide the legal mandate to enforce and improve appropriate land husbandry practices. Some of the relevant provisions are as follows:

- ***Maintenance of soil fertility***
  Crown Agricultural Leases (CAL) specify this in provisos (10). ALTA 13 (2b &c) specifies cultivation to maintain fertility and avoidance of measures reducing fertility.
- ***25º limit to usage***
  CAL provisos 11 & 17 ban cultivation, over grazing, burning and tree felling on areas steeper than 25º. ALTA schedule 3 proviso 8 states that limit.

- ***Soil erosion control***
  ALTA Schedule 3 proviso 7 provides instructions to tenants to apply measures to check soil erosion. CAL proviso 29 implements.

- ***Burning in cane lands***
  ALTA is not specific on slopes below 25º, however the provisions in the maintenance of soil fertility above can be applied to control burning.

- ***Forbid planting with the slope***
  ALTA schedule 3 proviso 7 can be applied to control erosion. Land Conservation & Improvement Act, Order 21 (1959) instructs all sugar cane to be grown along the contour.

- ***Vetiver grass hedgerows***
  Research results show the value of this technique.

- ***Agroforestry alley cropping***
  This is a desirable practice to incorporate into the farming system for soil fertility and soil erosion.

- ***Fencing of cattle***
  Uncontrolled cattle damage crops. There is need for protection under the Land Conservation & Improvement Act and ALTA.

- ***Stocking Rates (livestock units)***
  There is a hint of responsibility with the Committee of Valuers under ALTA 1985 revision Section 21. This clause could be used to clarify definitions related to overgrazing.

- ***Drainage and reclamation works***
  This satisfies the improvements provisions of the LCIA 1953 Cap 141- a broad component little used.

- ***Keeping water ways clean and flowing***
  Importance of waterway maintenance is often ignored by logging, housing, farming, pastoralism and manufacturing. Blocked waterways overload systems with pollutants and sediment. (Rivers and Streams Act, Public Health Act & Environment Management Act).

- ***Pollution of water environment***
  Land and water are complimentary resources and have detrimental acting impact on each other. (EMA).

- ***Riparian strips, corridors and belts***
  These provide filter zones for land-sourced sediments and have a key role in keeping creeks clean and also maintaining bank erosion.

- ***Misuse of roadsides***
  CAL proviso 11 addresses this for steep areas but can be expanded to accommodate mass movement and improved soil cover purposes.

- ***Litter, refuse and discarded machinery***
  Environment Management Act &Anti Litter Decree address this but LCIA land improvement under Cap 144 must always be viewed as enhancing land values. When rubbish dumps develop unabated land values fall.

- ***Mangrove environments***
  Values of mangrove areas need to be assessed and fully recognized. Building roads through these and reclaiming them should never have been done without careful analysis and results.
- ***Closed Areas /Orders to do Work / Conservation Orders***
  Should imply protection and rehabilitation together for meaningful proclamations. The Land Conservation Board is already empowered to do this.

## (e) Land Tenure – Some Lease Conditions

The lease conditions given below are uplifted from the lease documents of the Native land Trust Board and the Lands Department. The portions mentioned relate primarily to agriculture (landuse), which the LCB is concerned with.

***NATIVE LAND TRUST BOARD - ALTA Leases on Native Land***

**FOR AGRICULTURAL PURPOSES**

### Lease Conditions related to agriculture [Conditions 2 (l to q)]:

**Condition 2**
**(l)** To

i. Farm and manage the land in such a way as to preserve its fertility and keep it in good condition;
ii. Keep the land clear of all refuse weeds vermin and rubbish; and
iii. Regularly manure the land,
all in accordance with good husbandry practice.

**(m)** To enclose with good and substantial fencing to the satisfaction of the lessor the whole or any portion of the land used for the grazing of pasturing of livestock.

**(n)** Not to_
i. Fell trees or clear off burn or cultivate and land within a distance of eight metres from the bank of any river or stream;
ii. Clear, burn off or cultivate any hillside having a slope of more than twenty five degrees from the horizontal or the top twenty five percentum (measured vertically) of any hills having such slopes;
iii. Plant any crops within ten metres of the center of any public road; or
iv. Permit excessive grazing on the land.

**(o)** Not to remove or dispose of by way of sale or otherwise,
i. Any forest produce as defined in the Native Land (Forest) Regulations, or
ii. Any sand, gravel, common stone, limestone, coral, clay, top soil or other similar substances lying in under or upon the land save only those material (not being found in a river or stream bed) as may be necessary to construct or repair a road or yard upon the land, without the written consent of the lessor first had and obtained and subject to such conditions and to the payment of such royalty or otherwise as the lessor may direct.

**(p)** Not to cut down fruit trees on the land without the written consent of the lessor.

**(q)** Not to permit any act matter or thing whatsoever to be done in or upon the land or buildings or any part thereof which shall be or maybe or grow to be to the nuisance of any occupier lessee or owner of adjoining or neighboring land and property.

***LANDS DEPARTMENT - ALTA Leases on Crown Land***

**AGRICULTURE OR GRAZING LEASE**

## Conditions related to agriculture [Conditions 8 to 18 & 29]:

8.0 The lessee shall not remove or dispose of by sale or otherwise any forest produce growing upon the demised land without the written consent of the lessor first had and obtained and subject to such conditions as to the payment of royalty or otherwise prescribed by the Forest Regulations as the lessor may direct.

9.0 The lessee shall plant at least one half of the demised land suitable for cultivation with crops in a good and husband-like manner within the first two years of this lease and three-quarters within four years and the said minimum of three-fourths of the land shall be kept under cultivation as aforesaid for the remainder of the term.

10.0 The lessee shall manure the portions of the demised land planted as aforesaid and shall keep the whole in good condition and shall not allow any part to become impoverished and shall use such artificial or other manure as may be required by the lessor or an officer authorized by the lessor in that behalf in writing.

11.0 The lessee shall not fell trees or clear or burn off bush or cultivate any land within a distance of seven metres from the bank of river or stream or plant any crops within seven metres of the centre of any public road or on a slope exceeding twenty-five degrees from the horizontal.

12.0 The lessee shall stock the demised land at a minimum rate of one head of cattle or five sheep or goats per within the first five years of the lease and at a minimum rate of two head of cattle or ten sheep or goats per within ten years of the date of commencement of the lease and the land shall be kept stocked as last aforesaid for the remainder of the term of the lease.

13.0 Should the lessee use any portion of the demised land for agricultural purposes otherwise than for growing crops for the use of stock or persons upon the premises or for the erection of buildings not incident to the purposes of this lease the lessor shall have the right to reassess the rent of the land so used subject to penalty of re-entry should the lessee not accept such reassessment of rent.

14.0 The lessee shall not, without the prior consent of the lessor in writing, take use or otherwise injure any forest tree growing upon the demised land except for the purpose of clearing the land for the planting of grass or of erecting fences or of buildings incidental to the use of the demised land for grazing purposes.

15.0 The lessee shall keep the demised land clear of all refuse, rubbish, weeds and unsightly undergrowth to the satisfaction of the lessor.

16.0 The lessee shall apply such measures to check soil erosion as may be required by the lessor in writing and shall maintain such measures to the satisfaction of the lessor or of an officer appointed by the lessor in writing.

17.0 The lessee shall not clear, burn off or cultivate or permit excessive grazing of the top twenty-five per centum of the hills (as measured vertically) which have a slope exceeding twenty-five degrees from the horizontal.

18.0 The lessee shall bear, pay and discharge all existing and future rates, taxes or assessments, duties, impositions and outgoings whatsoever imposed or charged upon the demised premises or upon the owner or occupier in respect thereof or payable by either in respect thereof.

19.0 The lessee shall not subdivide the land without the written consent of the lessor first had and obtained and then only in accordance with a plan of subdivision approved by the lessor in writing.

20.0 The lessee shall carry out such drainage works as may be required to the satisfaction of the lessor.

21.0 The lessee shall keep clean and open and maintain in good condition all drains, ditches, watercourses and drainage and sewage systems in upon or intersecting the demised land to the satisfaction of the lessor.

22.0 The lessee agrees that the Lessor or any authorized person or persons may at any time without let or hindrance enter upon the demised land to construct, place, or maintain, posts, pipes, cables or wires and drains of any nature whatsoever above or below the ground anywhere within the demised land.

23.0 The Lessee shall not erect or permit to be erected any structure of any nature whatsoever over those portions of the demised land where posts, pipes and cables or wires have been placed wand where drains, of any nature whatsoever have been dug; and he shall not do any matter, act or thing that shall or may damage any post, cable, wire or drain or impede the flow of water along any drain constructed within the demised land.

24.0 The Lessee shall not erect or permit to be erected any structure over or upon any portion or portions of the land hereby leased and shown on the plan hereon as drainage reserve and coloured blue; and shall not do any matter, act or thing that shall or may damage or impede the flow of water along any drain that has been or may be constructed or excavated along such drainage reserve.

25.0 The Lessor or any authorized person or persons may at any time without let or hindrance enter upon such drainage reserve for the purpose of carrying out any drainage works or repairs whatsoever.

29. 0 The lessee shall apply such measures to check soil erosion as may be required by the lessor in writing and shall maintain such measures to the satisfaction of the lessor. Provided that any such measures qualifying as improvements under Part II of the schedule to the Agricultural Landlord and Tenant Act shall have the recommendation of a nominee of the Director of Agriculture.

**(f) Extracts of the Financial Management Act**

Trust money is money that the agency is holding in trust (it does not include creditor payments such as salary deductions or money that is held in a separate "trust fund" which is not a true trust) As stipulated in the Act and Finance Instructions, trust money is to be kept in a separate bank account and accounted for separately from "public money" and "other money".

The policies and procedures in this Part assign particular responsibilities to:

- the *Accounting Head;*
- a *trust officer;*
- an accounts officer

***General responsibility of responsible authorities for financial management***

The responsible authority for a state entity is responsible for managing the financial affairs of the entity in accordance with the requirements of this Act and with due regard to the principles of responsible financial management.

*(Financial Management Act 2004 s(7))*

Trust money means money held by a budget sector agency on trust, other than public money.

*(Finance Management Act 2004 (s(2))*

Trust money is to be accounted for separately from public money and other money within the meaning of this Act.
Trust money is to be kept in a separate bank account pending its withdrawal (including withdrawal for use or investment).
Subject to section 55 (2) and to the objects of the relevant trust, trust money is to be accounted for, banked, invested, reported on and otherwise controlled in accordance with the Finance Instructions.

*(Financial Management Act 2004 s(25))*

***Principles of responsible financial management***

The principles of responsible financial management are as follows –

(a) (a) to manage finances over the medium term on a responsible and transparent basis;

(b) to manage revenues and expenditure in such a way as to achieve prudent levels of debt;

(c) to ensure value for money in the use of money and resources;

(d) to manage contingent liabilities in a prudent manner;

(e) to report transparently in accordance with relevant accounting and statistical standards.

*(Financial Management Act 2004 s(5))*

***Accounting***

(1) Accounting Heads may only open a trust bank account with the prior written authority of the Chief Accountant.

(2) The receipt and payment of trust money should be recorded in a separate cashbook or set of ledger accounts.

(3) Each month, the trust account shall be balanced and reconciled with the trust bank account. The names and balances of each account shall be listed and the reconciliation shall be signed by the responsible officer. Unreconciled items should be investigated and resolved promptly.

(4) Each year, a statement of receipts and payments shall be prepared for audit and inclusion, when required, in the agency's annual report.

(5) Each payment of trust monies must be supported by an expenditure voucher which contain details of -

(a) (a) the date;
(b) (b) the payee;
(c) (c) the amount; and
(d) (d) the reason for the payment.

Each expenditure voucher for trust money must be signed and dated by the authorising officer, who must be independent of the officer responsible for maintaining the trust account records.

*(Financial Instructions 2005 s(69))*

***Keeping Proper Trust Records***

- The *trust officer* shall properly file correspondences, reports, trust agreements and other relevant trust documents. Each trust account shall have its own file.
- The *trust officer* shall keep a trust ledger to record movement of trust money. The ledger shall record the following information:
    - name of trust account;
    - date and amount of receipts and payee;
    - date, amount paid and payer including reference number;
    - balance to date.

*(Proforma Finance Manual)*

***Trust Reports***

Trust Reconciliation

- Within 5 days after the end of each month, the *trust officer* shall prepare a trust reconciliation to reconcile trust account balances to the ledger total and the trust bank account.

- Details of balances must be attached to the reconciliation statement.

- The *trust officer* shall certify and date the reconciliation statement after ensuring that all balances in the statement are verified to supporting documents.

- The *trust officer* must submit the trust reconciliation to the *Accounting Head* within 10 days of the end of the month.

## *Annual Trust Receipts & Payments Statement*

- Each year the *trust officer* shall prepare an annual trust receipts & payments statement within two weeks of the end of the year.

- The statement must be certified and dated by the *trust officer*. It shall include supporting notes providing details of outstanding balances or adjustments. The *trust officer* shall submit the statement to the *Accounting Head*.

- The *trust officer* shall make available for the audit the necessary trust documents supporting the transactions and balances of the trust account.

- The audited financial statement of trust balances shall be included in the agency's annual report.

**SIGNATURE PAGE**

Country: Fiji

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| UNDAF Outcome(s): | Environmental Sustainability Energy Mainstreamed into national and regional policies, planning frameworks and programmes. |
| Expected Outcome(s)/: | Capacity Development for Sustainable Land Management in Fiji |
| Expected Output(s)/: | Sustainable Land Management mainstreamed into national development policies, strategies, programmes and projects |
| Implementing partner: | Ministry of Agriculture |
| Other Partners: | UNDP |

Programme Period: 2008-2011
Programme Component: Energy and Environment
Project Title: LDC-SIDS Portfolio Project for Sustainable Land Management
Award / Project ID: 00038423 / 00042574
Project Duration: 4 Years
Management Arrangement: NEX

| | |
|---|---|
| Total Budget | **1, 197,477** |
| Preparation Phase (PDF-A) | 25,000 |
| GEF | 475,000 |
| Co-financing: | |
| • Government | 697, 477 |

**Agreed by (Government):**

_____**Date**_____

**Agreed by (Implementing partner/Executing Agency):**

_____**Date**_____

**Agreed by (UNDP):**