



Government of Jamaica
 United Nations Development Programme
 and
 The Global Environmental Facility



Capacity Building for Sustainable Land Management in Jamaica

PIMS 3468 - Atlas Project ID 00044037

The integrity of ecosystem functions and services, on which biodiversity, agricultural production and income-generating opportunities in rural Jamaica, are seriously affected by land degradation. The objective of the project is to enhance effective sustainable land management (SLM) by building capacities for SLM in appropriate government and civil society institutions and user groups and mainstreaming SLM into government planning and strategy development. Outcomes are: 1) SLM is mainstreamed into national institutions, policies, strategies, and plans; 2) Capacity for management, application and adaptation of SLM is enhanced; and 3) Effective management and adaptive learning is achieved.

The project aims to minimize and prevent land degradation by mainstreaming SLM through strengthening the institutional framework, developing a coherent policy and legal framework, mainstreaming SLM into the country's development planning and medium-term economic framework, and improving the technical capabilities and know how within government institutions as well as within key stakeholder groups. The project will also build technical capacity on SLM through training and demonstration activities. The latter will demonstrate improved methods of land rehabilitation and soil conservation, as well as small-scale irrigation systems and agro-forestry. The project will therefore help establish priorities and strategies that address the underlying causes of land degradation in rural communities by strengthening relevant institutions.

Existing institutional structures will be strengthened while creating a coherent policy and enabling legal environment which will assist Jamaica in meeting its environmental obligations to the CCD in keeping with national priorities. The project will support the development of tools that enhance expertise within resource user groups, farmer's groups and government organizations and NGOs concerned with agro-forestry, small-scale irrigation systems, soil conservation, and land rehabilitation.

The Government of Jamaica will execute this project over a period of three years, starting in 2007 through the Forestry Department, working closely with a Project Steering Committee (PSC) that will provide high-level policy guidance and oversight. A project management unit will execute the project. The total budget of the project is US\$ 986,000 of which US\$ 500,000 is from the GEF. The UNDP is the GEF Implementing Agency.

On Behalf of	Signature	Name/Title	Date
Forestry Department			
PIOJ			
UNDP			



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

GEFSEC Project ID:
Agency's Project ID: 3468
Country: Jamaica
Project Title: Capacity Building for Sustainable Land Management in Jamaica
GEF IA/ExA: UNDP
Other Executing Agency (ies): Forestry Department
Duration: 3 years
GEF Focal Area: Land Degradation
GEF Operational Program: OP 15
GEF Strategic Priority: SLM-1
Estimated Starting Date: December 2007

FINANCING PLAN (US\$)	
GEF PROJECT/COMPONENT	
Project	475,000
PDF A	25,000
<i>Sub-Total GEF</i>	500,000
Co-financing	
GEF Agency	45,000
Government	125,000
Bilateral	
NGOs (JCDDT)	316,000
<i>Government (PDF-A)</i>	3,890
<i>Sub-Total Co-financing:</i>	489,890
<i>Total Project Financing:</i>	989,890
FINANCING FOR ASSOCIATED ACTIVITY IF ANY:	

Country Eligibility: UNCCD ratification on 22 November 1997
Eligible under paragraph 9(b) of the GEF Instrument: eligible to receive technical assistance from UNDP and borrow from the World Bank.

CONTRIBUTION TO KEY INDICATORS OF THE BUSINESS PLAN: The project will build capacities for sustainable land management, rural development and drought management in Jamaica with environmental benefits accruing to a land surface area estimated at 10,981 square kilometers.

This project proposal was prepared in accordance with GEF policies and procedures. This project proposal 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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Date: 25 September 2007

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Acronyms and Abbreviations

ADA	Association of Development Agencies
ADS	Agricultural Development Strategy
APR	Annual Project Review
ASSP	Agricultural Support Services Project
BMJCNP	Blue Mountains and John Crow National Park
CARICOM	Caribbean Regional Community
CBOs	Community Based Organization
CCA	Common Country Assessment
CCD	United Nations Convention to Combat Desertification
CDB	Caribbean Development Bank
CIDA	Canadian International Development Cooperation
CSGM	Climate Studies Group Mona
DFNS	Debt-for-Nature Swap
EFJ	Environmental Foundation of Jamaica
ELP	Emancipation Land Programme
ENGO	Environmental Non-Government Organization
FAO	Food and Agricultural Organization
FD	Forestry Department
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GIS	Geographical Information System
GoJ	Government of Jamaica
GPS	Global Positioning System
IA	Implementing Agency
IDB	Inter-American Development Bank
ILME	International Land Management Expert
IWCAM	Integrated Watershed and Coastal Area Management
JAS	Jamaica Agricultural Society
JI	Jamaica Bauxite Institute
JCDT	Jamaica Conservation and Development Trust
JNEAP	Jamaica National Environmental Action Plan
LAMP	Land Administration and Management Programme
LD	Land Degradation
LDC	Least Developed Countries
LLDE	Lead Land Degradation Expert
LMC	Land Management Consultant
MAL	Ministry of Agriculture and Lands
MDG	Millennium Development Goals
MHTWW	Ministry of Housing, Transport, Water and Works
MITEC	Ministry of Industry, Technology, Energy and Commerce
MLGE	Ministry of Local Government and Environment
MoFP	Ministry of Finance and Planning
MSP	Medium Sized Project
MTSEPF	Medium-term Socio Economic Framework

NAP	National Action Programme
NCSA	National Capacity Self-Assessment Project
NEAP	National Environment Action Plan
NEPA	National Environment and Planning Agency
NEST	National Environmental Societies Trust
NFMCP	National Forest Management and Conservation Plan
NFPF	National Forest Programme Facility
NGOs	Non-Governmental Organization
NIC	National Irrigation Commission
NIP	National Industrial Policy
NIDP	National Irrigation Development Policy
NLA	National Land Agency
NLP	National Land Policy
NMS	National Meteorological Service
NRCA	Natural Resources Conservation Authority
NRS	Natural Resource Sociologist
NSIS	National Spatial Information System
NSS	National Settlement Strategy
NSSD	National Sustainable Development Strategy
NWP	National Water Policy
ODPEM	Office of Disaster Preparedness and Emergency Response
PALM	Protected Area and Land Management
PCJ	Petroleum Corporation of Jamaica
PDF	Project Development Facility
PIOJ	Planning Institution of Jamaica
PIR	Project Implementation Report
PMU	Project Management Unit
PRSP	Poverty Reduction Strategic Plan
PSC	Project Steering Committee
RADA	Rural Agricultural Development Authority
REACT	Rural Enterprise Agriculture and Community Tourism
RPPD	Rural Physical Planning Department
SIDS	Small Island Developing States
SLM	Sustainable Land Management
SRDP	Sustainable Rural Development Policy
ToRs	Terms of References
TPR	Tripartite Review
UN	United Nations
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
USAID	United States Agency for International Development
UWI	University of West Indies
WRA	Water Resources Authority
WRDMP	Water Resources Development Master Plan

Elaboration of the Narrative

I. Situation Analysis

A. Environmental Context

1. Jamaica is the third largest of the geographical group of islands in the Caribbean Sea, located approximately 145 kilometers south of the island of Cuba and 161 kilometers west of Haiti with a land area of 10,981 square kilometers. The island has an exceptionally broad diversity of topography, geology and climate. Approximately 65% of the island's bedrock is limestone, 25% volcanic and cretaceous, and 10% alluvial. Jamaica's important mineral deposits include bauxite, gypsum, lead, and salt, all of which are part of Jamaica's mining sector and the country's second highest source of foreign exchange.

2. Jamaica's climate is tropical maritime while its most important broad-scale climatic influences are the Northeast Trade Winds and the island's orographic¹ features. The average temperature in the lowlands is 27°C and 22°C in the mountains. Annual rainfall on the coast is about 818mm, and can be more than 5,080mm in the mountains. The coastal plains, particularly in the southern part of the island, experience low rainfall, and are also important areas for food production and support a number of farming communities.

3. Jamaica is rich in biological diversity. The country has two sites on the IUCN/ UNEP WWF list of two hundred Centres of Plant Biodiversity². The forests contain top quality timber, such as cedar, mahoe, mahogany, logwood, rosewood, an ebony, palmetto palm and pimento. Floral biodiversity is high due to the island's isolation from other islands and because of the island's large number of microclimates and variety of ecosystems. These ecosystems include montane forests, dry and wet limestone forests, coastal wetlands, savannah, rivers, springs, seagrass beds, coral reefs, and near shore cays. The diversity of Jamaica's insect and animal species is also significant, with many endemic ants, snails, crabs, butterflies, amphibians and reptiles. There are 31 endemic bird species and two endemic bat species, as well as two endemic mammalian species.

4. The country's natural resource base is critical to its economic and social development, but the ecosystem services that are essential for meeting social and economic needs are fragile and under stress. Of particular concern are the removal of trees and vegetative cover on hill slopes, unplanned settlements, deterioration of fresh and marine water quality, and reduction or loss of species diversity due to habitat destruction. The National Environment Action Plan (NEAP, 1995) stated that watershed degradation, deforestation, land degradation in the hills, pollution of surface, ground and sea water, and developments on the lowlands are the major environmental problems faced by Jamaica.

5. Jamaica has an igneous and metamorphic core largely covered by limestone deposited during periods of marine submergence. Limestone covers about two-thirds of the island,

¹ Orographic lift refers to the movement of an air mass over rising terrain, and thus from low to high elevation. The air mass expands and cools as it rises, creating clouds and frequent precipitation.

² Cockpit Country and Blue and John Crow Mountains National Park

concentrated in the central and western parts of the island. Igneous and metamorphic rock, shale and alluvium cover the remaining third of the island. Jamaica's soils can be classified into several geological categories. The soils of the upland plateau, formed from weathered limestone, constitute approximately 64% of the island's soils, while alluvial soils located on flood plains, river terraces, inland valleys and coastal plains constitute approximately 14%. The highland soils (covering the shale areas of the Blue, John Crow and Port Royal Mountains in the east and the Dry Harbour Mountains in the central region) constitute 11% of the island's total soils.

6. According to the National Environment Action Plan (NEAP), 19 of the 26 newly defined watersheds are listed as critical, owing to the degree of their degradation. Many of these watersheds are located in rural areas where the majority of rural residents rely, at least to some degree, on the food, fiber, energy, and construction materials harvested from the forests/watersheds within which they live. Consequently, their activities have contributed to the degradation of the watersheds. Additionally, many farmers who do not own land cultivate hillside slopes using slash and burn farming methods, which have contributed to increasing environmental degradation such as soil erosion, flooding, deforestation, water pollution and loss of biodiversity. This environmental degradation is linked to the pressures of rural poverty. While there is anecdotal information on soil loss, there is no scientific information on soil loss or an evaluation of the impact of soil loss on soil productivity.

7. Deforestation is another important form of environmental and land degradation. Approximately 335,900 hectares, or just over 30% of Jamaica, is classified as forest. Forest cover is being lost at a rate of approximately 0.1% per annum. The Forestry Department has identified the main causes for forest loss as: a) soil erosion, b) illegal removal of timber or fuel wood, c) slash and burn cultivation, d) illegal fires, and e) illegal cultivation. The clearing of forests and slopes has made way for coffee production, and to produce yam sticks, charcoal, fence posts, and timber. This has accelerated soil erosion, causing significant impacts on coastal areas, in particular the siltation of coral reefs.

8. Unplanned or improperly sited human settlements, 80% of which are on slopes greater than 25 degrees, together with inadequate infrastructure and services, add to the stress and increasing instability of watersheds and coastal areas. Landslides, flooding, and seasonal drought are increasingly causing loss of life, property, and economic potential.

9. Drought has had adverse impacts on communities and the natural environment, the management and mitigation of which remains a challenge. Over the past four decades, Jamaica has experienced varying degrees of drought, and undertaken some work to develop predictive models, albeit unreliable. A study on drought alleviation by the Water Resources Authority (WRA) recommended the institutionalization of planning for drought as opposed to the current practice of managing drought as a crisis. The GoJ's experience in the latter has demonstrated that these short-term efforts are expensive, lead to confrontation, create health risks, and have to be repeated each time a drought occurs.

10. One of the serious expected or potential climate change impacts that Jamaica may experience is from hurricanes, such as Hurricane Gilbert that devastated much of the island in 1988. In its wake, Hurricane Gilbert resulted in significant flooding and landslides that

destroyed civil infrastructures and a large portion of the country's agricultural landscapes, costing the economy an estimated US\$ 8 billion.

B. Socio-Economic Context

11. The World Bank classifies Jamaica as a Lower Middle Income with a Gross National Income of US\$2,820³. Although Jamaica has experienced low economic growth in recent years, the country has achieved high and rising social indicators, and ranks 78th according to UNDP's Human Development Index.

12. The country had a resident population of approximately 2.6 million at the end of 2001, 57% of which were less than 30 years old. At the end of 2001, the population was growing at an estimated rate of 1% per annum. About 55% of the population lives in urban areas and the population density is around 236 per square kilometer. The remainder of the population lives in rural communities, in which 71.5% of the nation's poor reside.

13. The main economic concerns for Jamaica include low growth rates high interest rates, continued slippage of the Jamaican dollar resulting in inflation and represent a challenge to foreign debt servicing. From 1990 to 2002, Jamaica's economic growth rate fell from 3.8% to 1.0% and debt servicing rose from 13.6 % of GDP to 36.3%. Additionally, the country continues to face challenges of low productivity levels, high levels of unemployment and dependence on external markets. Average unemployment remained at around 15% for the same period with the women experiencing higher percentage of joblessness around 21% in 2002. The rural communities experience the highest rates of unemployment. The concerns with the economy and the debt burden have led to a scarcity of resources to finance environmental initiatives in relation to matters of security and other social sector services.

14. After independence in 1962, Jamaica's natural resource base has continued to be critical to the country's economic development. Traditionally, the island's major economic sectors were mining and agriculture. Since independence, the economy has been transformed from one based mainly on the export of primary agricultural products and mineral commodities, to a service economy in which tourism is now the principal earner of foreign exchange together with bauxite mining. The expansion of these sectors has been accompanied by increased conflict and heavy demands on the natural resource base although tourism depends on landscape values associated with healthy and functional ecosystems. However, agriculture and farming remain the main form of livelihoods in rural communities.

15. The agricultural sector plays an important role in the economic and social development of Jamaica. However, over the last twenty years there has been a significant decline in the sector due to many factors that include: a) trade liberalization (which has opened the country to the importation of 'cheap food'); b) lower production in tradition crops (e.g., sugar); c) unavailability of water; d) weak marketing and distribution systems; e) the higher costs of

³ World Bank (2004), World Development Report "Making Services Work for Poor People". Jamaica is in the top tier of the Lower Middle Income bracket, which ranges from US\$736 to US\$2,935.

inputs (e.g., fertilizers and herbicides); and f) the relatively low priority given to the agricultural sector by the GoJ. This decline has contributed to rural-to-urban drift and increased rural poverty.

16. Forestry, agriculture and human settlements are the three most widespread land uses in Jamaica. Forestry and agriculture are predominant, occupying 87% of the land area. The agricultural sector occupies around 537,265 ha (53%) of Jamaica's total land area, of which approximately 270,000 ha is currently being cultivated. The three principal types of agricultural use are plantation crops grown mostly for export, mixed farming of food crops for domestic consumption and export, and pasture for beef and dairy cattle for local consumption. Agriculture is not achieving its potential in providing a comfortable way of life for the majority of farmers nor has it developed to the point where the sector meets local consumption and export demands. This has resulted in under-utilization of large acreages of arable lands.

17. Water is a critical requirement for the development of the agricultural sector. The National Irrigation Commission (NIC) reported that in 1996 approximately 25,000 ha, or 10% of cultivated lands in Jamaica, was irrigated by large-scale systems. There has been little increase over the last ten years. Of these irrigated lands, 50% are served by public irrigation systems managed by NIC; the other half are on commercial estates, such as banana, papaya, and sugarcane, and individual private systems.

18. However, many small farmers are located on lands where access to large-scale irrigation systems is not possible and in the cases where irrigation water is available, the cost is often too high for a small farmer. There is also a paucity of small-scale irrigation technology in operation. Small farmers in most, if not all, parishes⁴ irrigate vegetables or fruit trees using their domestic water supply (if available and accessible) or from local surface sources, springs or rainfall. Rainfall harvesting is part of the country's traditional knowledge that is being lost. Delivering irrigation water to small farmers and develop small-scale irrigation systems in a cost-effective way thus remains a challenge.

19. The issue of land tenure has also had a negative impact on the agricultural sector and rural poverty. Poverty is evident in rural areas, both in terms of incidence and prevalence. Many small farmers in Jamaica do not have the title to the lands they cultivate and this affects their management of the resource as well as access to credit. If the problem of poverty among farmers is to be addressed, there must be action on three levels: macro-economic policy, institutional change and micro-level interventions⁵." In Jamaica, issues of land tenure, the absence of sustainable rural development options, and by extension the issue of rural poverty, have all contributed to land degradation.

20. With regards to the mining sector, limestone quarrying is a significant activity, although mining of bauxite ore⁶ remains the main mining activity. Jamaica also has significant reserves of

⁴ Jamaica is divided into 14 geo-political units, or parishes, ranging in size from 430 sq. km. to over 1,200 sq. km. (not including the city of Kingston, which is also considered a parish).

⁵ Draft Sustainable Rural Development policy, May 2004, PIOJ.

⁶ Jamaica first mined bauxite commercially in 1952, and from the late 1950s until 1971, Jamaica was the world's largest producer of bauxite. The current bauxite reserves are estimated at approximately 2,500 million metric tons,

other commercially viable minerals, including gypsum, silica, and marble. Limestone covers about 80% of the island, making the total estimated reserves of 50 billion tons virtually inexhaustible. Mineral extraction results in mined-out pits (bauxite) or scarred hillsides (limestone), which contribute to land degradation when not appropriately rehabilitated. Existing land rehabilitation methods in the bauxite sector require that the mined-out area be rehabilitated to support the growth of grass thereby limiting the options for utilization of the land. There is very limited experience in the rehabilitation of limestone quarries.

C. Policy, Institutional and Legal Context

21. The Government of Jamaica (GoJ) has made considerable progress during the past decade towards refining the policies, laws, and institutional framework needed to achieve effective management, conservation, and protection of natural resources in general within the context of sustainable development. Jamaica has promulgated a number of laws that serve to protect and manage the island's natural resources. The following list those laws of relevance to sustainable land management.

- The Natural Resources Conservation Authority Act (1991)
- The Wild Life Protection Act (1945)
- The Watershed Protection Act (1965)
- The Beach Control Act (1956)
- The Forest Act (1996)
- The Fishing Industry Act (1975)
- Protection, Conservation and Regulation of Trade of Endangered Species Act (2000)
- Town and Country Planning Act, 1948 (amended in 1999)
- The Mining Act of 1947 (amended in 1988)
- The Quarries Control Act (1983)
- Water Resources Authority Act (1995)

22. In addition to these, several overarching policy frameworks are also very relevant to SLM in Jamaica:

23. Jamaica's 2004 Sustainable Rural Development Policy (SRDP) states the country's commitment to rural development as an integral part of its overall thrust for sustainable development through five goals:

- Promote growth in rural areas while protecting the environment
- Promote investment in services and infrastructure
- Build more effective, integrated and participatory processes for rural development
- Support the development of human and social capital
- Focus attention on eradicating poverty and promoting social inclusion in rural areas

of which approximately 1,500 million metric tones are estimable to be available from among 30% of the country's land mass.

24. A major focus of this policy is to increase the efficiency, productivity and competitiveness of local farmers in keeping with the 2005 Agricultural Development Strategy. Given the prevalence of poverty in rural areas and their dependence on agriculture, the SRDP serves as an integrated and comprehensive strategy for sustainable development of the rural economy that is underpinned by the goal of poverty reduction.

25. Jamaica's National Land Policy (NLP) was developed to guide the management of the country's land resources and deals with several issues relating to the availability of and access to land. The objective of the NLP is to establish a framework for the efficient planning, management, development and use of land.

26. With support from the European Commission, the Planning Institute of Jamaica (PIOJ) prepared Jamaica's Medium-term Socio-Economic Policy Framework (2004-2007) (MTSEPF) in collaboration with the Ministry of Finance and Planning (MoFP) and the Bank of Jamaica. The MTSEPF builds on the policy framework established in the 1996 National Industrial Policy (NIP), the latter designed to provide a systematic, holistic and comprehensive approach to Jamaica's development into the 21st century. The MTSEPF describes a number of activities that are related to SLM and the impacts of land degradation that are being undertaken in the country. These include the development of a national spatial development plan, a squatter management policy, a hazard mitigation policy, and a national solid waste management policy.

27. The Government of Jamaica is presently drafting their Poverty Reduction Strategic Plan with the help of an inter-sectoral Task Force. Five objectives are outlined as approaches to reduce poverty in the May 2007 draft of the PRSP. These are: a) to improve evidence-based mechanisms for monitoring poverty; b) to provide equitable access to basic goods and services; c) to develop a more responsible public to the causes and impacts of poverty; d) to create and expand economic opportunities; and e) to promote social inclusion.

28. A number of government agencies have varying roles and responsibilities that affect land management and have responsibility for the application and implementation of these policies and legal instruments. Government organizations that are central to promoting and implementing sustainable land management are identified in Table 1. The interactions between these various institutions interact and their respective strengths and weaknesses, as well as the opportunities and barriers posed by the policy and legal framework are discussed and elaborated in Section I.E, Barriers to SLM, and Section II.B, Capacity and mainstreaming needs for SLM.

29. The mission of the Ministry of Agriculture and Lands (MAL) is to increase and sustain the contribution of the agricultural sector to the economic growth and development of Jamaica through optimal use of land and other natural resources. The long-term vision of the MAL is the transformation of the Jamaican agricultural sector, supported by the 2005-2008 Agricultural Development Strategy (ADS).

30. The ADS is intended to revitalize the agricultural sector and catalyze rural and economic development, with a consequent reduction in rural poverty. To this end, the ADS calls for the rehabilitation, improvement, maintenance and extension of irrigation systems. The ADS also fully supports the implementation of the National Irrigation Development Plan (NIDP)

developed by the NIC. The NIDP is considered a document critical to the improvement of the agricultural sector in periods of drought. An important continued priority will be the arid, but highly productive, southern agricultural parishes.

Table 1: Key government agencies involved in land management

Ministries	Agencies
Ministry of Agriculture and Land (MAL)	Forestry Department Land Administration and Management Division Planning Policy and Development Rural Agricultural Development Authority Rural Physical Planning Unit
Ministry of Local Government and Environment (MLGE)	Mineral Policy and Development Division Mines and Geology Division National Environment and Planning Agency National Meteorological Service Office of Disaster Preparedness and Emergency Management Policy and Standards Division
Ministry of Finance and Planning (MoFP)	Planning Institute of Jamaica
Ministry of Housing, Transport, Water and Works (MHTWW)	National Irrigation Commission Water Resources Authority
Ministry of Industry, Technology, Energy and Commerce (MITEC)	Scientific Research Council
Office of the Prime Minister (OPM)	Jamaica Bauxite Institute

31. Under the aegis of the MAL, the Forestry Department is the lead agency for the sustainable management and conservation of Jamaica’s forests, the goal of which is to increase the environmental services and economic benefits they provide. Guided by the 1996 Forest Act and the 1996 Forest Land Use Policy, the Forestry Department produced and published the 2001-2006 National Forest Management and Conservation Plan (NFMCP). The NFMCP articulates the direction and goals of forest management in Jamaica and proposes strategies, programmes and activities for sustainable forest management.

32. The National Land Agency (NLA) is another agency under the MAL, established in response to the National Land Policy to streamline the land titling process and modernizing land registration systems. In conjunction with the MLGE, the NLA is in the process of strengthening a National Spatial Information System that provide geo-referenced data (e.g., property and topographic data) and the technology infrastructure to manage databases on land use, watersheds, soils, among other geographical data. One of the strengths of the NLA is that it maintains a comprehensive land information database, one of the most comprehensive of databases in Jamaica.

33. The Rural Development Agency (RADA) and Rural Physical Planning Unit both operate under the aegis of the MAL. The role of RADA is to promote agricultural production as the

main engine of growth for rural communities, and provides technical, marketing, financial and social services that directly address improving the quality of life for farming families. The Rural Physical Planning Unit provides advisory services on the land proposals, crop zoning, as well as carries out soil surveys and land assessments for farmers.

34. The Ministry of Local Government and Environment (MLGE) has a broad remit in overseeing Jamaica's system of local government administration as well as the administration of and planning of the country's built and natural environment. In particular, the stated mission of the MLGE is to achieve the highest level of sustainable environmental and land management practices that support the economic, physical and social well being of all Jamaicans. The MLGE is the Focal Point Institution on Land Degradation and SLM, and is currently developing the CCD NAP. The MLGE is in the process of preparing the Third National Report (3NR) to the CCD. The National Validation workshop and the National Self Evaluation report will be done over the month of September. The process is expected to be completed and the 3NR prepared by the end of September 2007.

35. However, the MLGE does not have the capacity or mandate to implement many of the actions required. With GEF assistance through UNDP, the GoJ is preparing a National Action Plan (NAP) to address land degradation, due to be approved by the Jamaican Cabinet sometime during 2007. While the preparation of the NAP takes place under the aegis of the MLGE, no MLGE agency has been named to implement the NAP and lead the country's SLM agenda. Despite the creation of the CCD Working Committee in 2000, it is inactive and has not met since 2002 September. The membership of this committee is similar to the Land Degradation Committee and Drought Management Committee, but with different chairs.

36. The National Environment and Planning Agency (NEPA) is the an executing agency under the MLGE, whose role is to promote the sustainable management of Jamaica's natural resources, facilitating extensive participation among citizens, and ensuring a high level of compliance to relevant legislation. NEPA is also responsible for administering the National Watershed Policy, which included the establishment of Local Watershed Management Committees and the Jamaica National Environmental Action Plan (JNEAP). Updated triennially, the JNEAP outlines major environmental problems, including the causes of land degradation. The JNEAP also recommends the necessary corrective measures for sustainable land management to be undertaken by ministries, agencies, private sector and civil society organizations. The NCSA builds upon the JNEAP.

37. Two other important agencies under the MLGE are the Office of Disaster Preparedness and Emergency Management (ODPEM) and the National Meteorological Service (NMS). Created after the June 1979 floods that devastated sections of Western Jamaica, the ODPEM is responsible for taking proactive and timely measures to prevent or reduce the impact of natural disasters, coordinating and monitoring the response to hazards, as well as educating the nation on all aspects of disaster management.

38. The NMS is a scientific division of the MLGE concerned with the observation and forecasting of weather conditions, as well as for maintaining a current database of the climate of Jamaica and for the utilization of this data in informing productive sectors of the country.

39. The Ministry of Finance and Planning (MoFP) is the principal financial organization of Jamaica with constitutional and legal responsibility for the prudent control of the financial resources of the GoJ. Through research and planning, it promotes the development and implementation of fiscal and economic policies intended to ensure sustainable growth in the national economy.

40. The Planning Institute of Jamaica (PIOJ) is an agency under the MoFP, and developed the draft Sustainable Rural Development Policy (SRDP) in 2004 to address rural poverty. The goal of the SRDP is to promote comprehensive and integrated actions towards: a) attaining growth in rural areas; b) the sustainable development of rural communities; and c) improvement of the livelihoods of rural dwellers especially impoverished groups. Once approved, an action plan will be developed to implement the SRDP.

41. An important institutional structure created after the 1992 Earth Summit was the Sustainable Development Policy Unit in the PIOJ, the role of which is “to facilitate [an] effective, integrated and coordinate approach to sustainable development.”⁷

42. The Ministry of Housing, Transport, Water and Works (MHTWW) was created in March 2006 under the newly appointed Prime Minister. Through its various agencies, the ministry’s mandate is to provide a safe and efficient transportation system, including a quality road system, affordable, safe and legal housing, as well as to provide adequate potable water for domestic and commercial purposes throughout the island. One of the areas of priority is to address the perennial problem of the inadequate supplies of water mainly during the dry seasons. The MHTWW’s agencies include the National Works Agency, National Housing Development Corporation, National Water Commission, and Water Resource Authority.

43. An example of poorly coordinated and contradicting policies is the power given to the Minister of the MHTWW to declare any lands to be used for housing. This has resulted in valuable agricultural lands being used for housing instead of agriculture, while lands that could be used for housing but not agriculture are left idle. The authority of the Minister of Housing may from time to time be at variance with the NLP and the GoJ’s commitment to provide land for the landless, particularly for agriculture.

44. The Water Resource Authority (WRA) under the MHTWW is responsible for the management, protection, and controlled allocation and use of Jamaica’s water resources. In particular, the stated mission of the WRA is to ensure the sustainability of Jamaica’s water resources through continual assessment and proper management, promotion of conservation and protection, and optimal development of these resources. The WRA also seeks to ensure the rational and equitable allocation of the nation’s water resources, as well as to reduce conflicts among water users. The WRA maintains a hydrological database and provides data, information, and technical assistance to government and non-government institutions.

⁷ Government of Jamaica (2004), Millennium Development Goals, p. 40.

45. The National Water Commission oversees the implementation of the 1999 National Water Policy (NWP), which represents the GoJ's formal adoption of the concept Public Private Partnerships (PPP) as an alternative management strategy for wastewater programmes. Since then the Government has been negotiating with private sector entities interested in administering selected water and wastewater programmes, and the NWC has been strengthening its capacity to deal with issues associated with private sector partnerships. The National Irrigation Commission (NIC) is another agency within the MHTWW, and is responsible for the sustainable development of Jamaica's irrigation schemes, including setting and collecting fees.

46. The goal of the Ministry of Industry, Technology, Energy and Commerce (MITEC) is to promote Jamaica's prosperity and stability through international competitiveness in commerce, rational energy use and productivity, facilitated by appropriate science and technology. Among the areas related to land management, the MITEC addresses the following areas of relevance to land management:

- Development of energy resources
- Gas and oil exploration
- Petroleum refinery haulage, storage, and distribution
- Rural electrification

47. The Scientific Research Council (SRC) is an agency under the Ministry of Industry, Technology, Energy and Commerce (MITEC), and is responsible for fostering and coordinating scientific research and development. Most of the SRC's projects support the growth and development of the agro-industrial sector in through research, adaptation of available technologies, creation of new and appropriate technologies and the provision of training and technical assistance.

48. The Jamaica Bauxite Institute (JBI) is an agency administered under the portfolio of the Office of the Prime Minister, and is charged with overseeing Jamaica's role in the bauxite and alumina industry. The JBI's functions are: monitoring and studying the aluminum industry; providing technical advice; undertaking research and development activities; assessing and ensuring rationalization in the use of Jamaica's bauxite reserves and (bauxite) land; and monitoring and making recommendations on pollution control and other environmental concerns in the industry.

49. Several environmental NGOs and community groups have carried out projects with farmers to manage land and environmental resources. Many of these have been funded by the Environmental Foundation of Jamaica (EFJ)⁸. Established in 1993, the EFJ provides grants to NGOs and academic institutions in Jamaica for environmental projects and child welfare. Numerous projects related to agriculture have been supported over the last decade. Founded in 1895, the Jamaica Agricultural Society⁹ is the leading national organization that provides services to farmers to help improve their standard of living through agriculture.

⁸ <http://www.efj.org.jm/>

⁹ <http://www.jas.org.jm/default.html>

50. Members of umbrella NGO groups such as the National Environmental Societies Trust (NEST) and the Association of Development Agencies (ADA) also work with rural communities and with farming interests. NEST was formed in 1987 as an umbrella group for environmental NGOs, advocating improvement of socio-economic policies. ADA promotes sustainable development and social change, creating a framework for debate, policy advocacy and analysis.

51. A Business Council for the Environment was launched in 2002 under the Environmental Action Programme to advocate environmentally friendly and sustainable development from among the private sector.

52. There are a number of planning frameworks that are also highly relevant to the objective of this project. Jamaica's 2006-2010 Common Country Assessment (CCA) identified rural poverty, under-development, and integrated land management among priorities towards achieving sustainable development. These priorities underlie the root cause of land degradation in Jamaica, given the economy's high dependence on the natural environment, particularly in the major productive sectors of tourism, mining and quarrying, manufacturing and agriculture.

53. UNDP's Country Programme for 2007-2011 was developed under GoJ leadership and in close consultation with civil society and development partners. Building on the CCA and the United Nations Development Assistance Framework (UNDAF) for the period 2007-2011, as well as thematic working groups chaired by GoJ officials, UNDP's country programming will focus on meeting UNDAF Priorities 2 (HIV/AIDS), 3 (Environment and Poverty), and 5 (Justice, Peace and Security).

54. The Government of Jamaica's report on the Millennium Development Goals (MDG) indicates variable progress in achieving human development objectives, with important achievements in the areas of poverty reduction, primary education, and female empowerment. Progress in the areas of reproductive health and HIV/AIDS, however, has been unsatisfactory. Between 1990 and 2001, the proportion of persons living on or below the poverty line fell from 28.4% to 16.9%. Towards achieving environmental sustainability, Jamaica has made progress in several areas, including reducing the rate of deforestation.

55. In terms of Land Degradation and the obligations in fulfillment of the UNCCD, the GoJ submitted the Second National Report to the CCD in 2002, and the Jamaican Cabinet is due to review and approved the Third National Report by late 2007. The Second National Report identified the following priorities:

- To increase national awareness of the problems of land degradation;
- To develop benchmarks and indicators for land degradation and drought;
- Identify and map the areas most affected and/or most vulnerable to land degradation and drought;
- Develop programmes to address causes of the significant annual soil loss;
- Establish a National Coordinating Body with responsibility for implementing the CCD;
- Develop an early warning system for drought;
- Improve the use of traditional knowledge in identifying practices aimed at preventing land degradation; and
- Identify additional financial resources to combat land degradation.

56. In particular, the Thematic Assessment on Land Degradation identified the need to develop stronger accountability with the system of Government to meet CCD obligations. Despite there being appropriate policies, laws and programmes for the implementation of the CCD, as well as the development of both the National Action Plan to the CCD and the Drought Management Policy and Plan, these are not adequately interpreted and enforced.

57. With the support of UNDP/GEF, the GoJ prepared their National Biodiversity Strategy and Action Plan (NBSAP) in 2003. The NBSAP serves as a strategic plan to help the GoJ meet its obligations under the CBD, which includes conserving biodiversity in their natural ecosystems, and thus calls for sustainable land management.

D. Causes of Land Degradation

58. Although the NSIS represents a form of land-use information system, the NSIS does not identify, quantify or qualify the categories of land degradation in the country. Land records are either in poor condition, lost or destroyed, and information retrieval is inadequate and difficult. The absence of data and a policy framework to address land degradation and SLM has meant that the root causes of land degradation in Jamaica have not been evaluated. However, the impacts of land degradation were identified and discussed during consultations with key stakeholder groups as part of the preparation of this project proposal¹⁰.

59. National stakeholder consultations on land degradation conducted in February 2006 identified the following as impacts of land degradation: a) soil erosion; b) loss of forests (quantity and quality); c) agricultural productivity decreased; d) insufficient water; e) un-rehabilitated mined-out areas; and f) rural poverty increased. Most of these issues are inextricably linked to the current state of the agricultural sector¹¹. The management of livestock was not identified in the stakeholder consultations as a significant cause of land degradation.

Expansion of the Agricultural Frontier

60. Deforestation results in soil erosion and degraded forest. The reasons for the removal of forest cover are mainly economic and are linked to rural livelihoods. Forest loss is estimated at 0.1% annually, or approximately 3,304 hectares per year. The need for survival has led to illegal removal of timber or fuel wood; slash and burn practices often resulting in wildfires; and illegal cultivation. The Forestry Department is promoting agro-forestry as one approach that will stem deforestation by providing short-term cash flow, while encouraging reforestation. Agro-forestry however, is not much practiced and there is still a need to demonstrate this as a viable solution to halting deforestation.

Agricultural Productivity and Farming Practices

61. Agriculture is the mainstay of many rural communities and potentially a catalyst for rural development. The decline of this sector (including financial returns) has seen an increase in rural poverty and the socio-economic and environmental consequences including rural-to-urban drift,

¹⁰ See Section paragraph 138.

¹¹ See Annex 5, which is a root cause analysis of land degradation based on inputs from four focus group meetings.

extraction of resources from forested areas (charcoal, yam sticks and minerals) and illegal cultivation. Many small farmers do not own the land they cultivate, which has fueled poor stewardship of the land encouraging poor practices such as cultivation on steep slopes and slash and burn, both of which contribute to soil erosion, decreased soil productivity and lower yields.

Under-valuation of Agricultural Lands

62. The under-utilization of arable lands is mainly the result of the low financial returns and risks that are associated with farming. Because of this, these lands offer potentially higher return on investment from housing than farming. This has led to increasing competition between housing and prime agriculture lands, an indication of sub-optimal land utilization. Despite the fact that the country has a NLP, issues of optimal utilization of lands, land zoning and land tenure remain significant but mainly unresolved. This is due in part to a general inertia in implementation of the policy directives, coupled with poor monitoring and evaluation of the impact of policy guidance.

Water Availability

63. Much of the country's agriculture is rain-fed. For most of the year, Jamaica has sufficient water resources, but precipitation patterns are not uniform throughout the island and poor farmers often face water scarcity. Ten percent of farming lands are irrigated, though most irrigation systems serve large plantations that grow crops such as sugar and bananas. Most of the precipitation falls in the northeastern mountainous part of the island, while the southern and southwestern plains often experience drought. The main farming areas for the country are located in the southern plains (St. Catherine, Clarendon, Manchester, St. Elizabeth and Westmoreland), which experience low rainfall and depend on rain for production. The majority of subsistence and small farmers are dependent on rainfall since there is no irrigation where they farm, affecting their productivity. Moreover, Jamaica currently has no early warning system for drought and therefore farmers tend to react to the occurrence of drought rather than to being proactive in managing its potential impacts.

Mining Practices

64. The mineral extraction sector also contributes to land degradation, leaving behind scarred hillsides and mined out pits. There is little practical experience in the rehabilitation of limestone quarries, and many limestone quarries remain un-rehabilitated. In the case of bauxite mining, there is a need to broaden the approach to land rehabilitation so that land utilization options in mined-out areas are not limited to grassland for cattle production, but can sustain other forms of agriculture. Agro-forestry is one option for the rehabilitation of mined-out bauxite land. This is of particular importance because many bauxite reserves are located in or near to forest reserves. More applied research to identify feasible options for rehabilitating mined-out lands for agro-forestry and agriculture.

Squatting

65. The growing incidence of squatting and its associated problems has had deleterious socio-economic and environmental impacts on the Jamaican landscape. The combination of poor siting of squatter settlements on marginal or environmentally hazardous lands such as rail reservations, along river banks and on steep slopes in watershed areas along with inappropriate construction techniques tend to increase their vulnerability to natural hazards. Housing

conditions in squatter settlements are often substandard due to poverty or the perceived threat of eviction and they often lack public infrastructure and services. This has also resulted in general indiscipline and disorder leading to increased crime and violence. Mapping all these critical areas, building a database, formulating policy that guides planned development for settlers and upgrading settlements through regularization by laying proper infrastructure are proposed strategies to address the problem. A squatter management unit was established in June 2006 with a staff complement of two members.

E. Barriers to sustainable land management

66. Despite the progress made to combat land degradation, Jamaica continues to face major challenges in addressing deforestation, habitat conversion and associated loss of biodiversity, the negative effects of mining and quarrying, pollution, and overall environmental degradation. These are largely due to the fragmented and overlapping policy and institutional frameworks, weak enforcement of legislation, and unsustainability of programmes beyond donor investment. For example, the NFMCP does not refer to the NLP, nor does the ADS refer to either the draft SRDP or the NLP.

67. Given the multiple policies affecting land resources (for example, Forestry Policy, Draft Sustainable Rural Development Policy, Agricultural Development Strategy, Draft Watershed Management Policy, and Water Sector Policy), there is no over-arching policy framework that helps strategically implement sustainable land management. However, although these policies make no direct mention of SLM, they do provide a foundation for the development of a coherent and integrated SLM policy framework. Furthermore, the GoJ has not given any agency direct responsibility for addressing SLM issues. The GoJ has not yet designated an organization to guide and coordinate the execution of the CCD NAP. Notwithstanding, the CCD NAP is currently under preparation under the aegis of the MLGE.

68. Consultations held as part of the NCSA process revealed that an important barrier to sustainable land management is related to the level of political commitment. While the NCSA was a catalyst that stimulated a growing awareness on the importance of SLM issues among some government decision-makers, ENGOs, and the agricultural community, sustainable land management is still assigned relatively low priority in the country's development planning. There is also little general recognition by decision-makers at the highest level that neglecting SLM is creating a significant barrier to sustained economic development. The impacts of land degradation and its linkages to rural development, rural poverty, drought management and sustainable land management (SLM) are not yet fully appreciated by the decision-makers and technocrats. This has resulted in the absence of serious consideration of LD and SLM in the country's development agenda and medium-term economic policy framework.

69. Another barrier to sustainable land management is related to land tenure. Many farmers live in poverty and therefore do not own their land. Unclear and cumbersome procedures and associated high transaction costs for acquiring title to land facilitates an exploitative attitude and unsustainable approach to land management. The implementation of the ELP programme has been slowed due to the absence of capacity to grant land titles because of insufficient land

surveying skills, difficulties in carrying out surveys due to accessibility, inadequate information management systems, understaffing in relevant departments and limited financial resources.

70. The barrier to implementing a policy for sustainable land management can be seen with the NLP, which identifies the limitation of agriculture to provide a sustainable livelihood for farmers. Agricultural practices largely remain limited to food production to satisfy local consumption. There is little expertise in agro-forestry at national and community levels, and suitable technology and methods available to farmers. Rural communities therefore rely on ecologically unsound land management practices, such as slash and burn, to grow crops. These traditional methods are not easily replaced due to insufficient demonstration of the new and better agricultural and rehabilitation practices. Expertise in sustainable land management at the community level and within the NGOs that work with them is too low to spread across a large number of communities across the island.

71. The government does not have a programme that adequately alleviates the low returns on agricultural produce for small and rural farmers, in keeping with the WTO agreement on agriculture that forbids these types of subsidies. There are no other financial or economic instrument that is available to small and rural farmers that are specifically directed towards improving land management practices.

72. The National Spatial Information System, although deemed a comprehensive database, does not include classifies land according to their cause or type of degradation. While this data may be available in various agencies, they are not readily accessible. As a result of the fragmentation of data, an overall assessment of the extent of land degradation in Jamaica represents a challenge to planners.

73. The main barriers to sustainable land management in Jamaica are thus:

- a. Fragmented and overlapping policy and institutional framework limit options for ecologically sound and sustainable management of land resources, as reflected in issues such as conflicting policies on land usage;
- b. Weak institutional leadership and capacity to implement, coordinate, and enforce existing land management programmes;
- c. Technical knowledge and capacities to identify, disseminate and implement best practices for sustainable land management are lacking;
- d. Low land ownerships and the high transaction costs associated with acquiring land titles contributes to low adherence to best practices for sustainable land management
- e. Marginal awareness of SLM requirements at all levels;
- f. Insufficient economic incentives and associated instruments; and
- g. The National Spatial Information System does not provide a comprehensive mapping of current land-use practices that contribute to land degradation.

74. Although a number of programmes and projects are underway to help remove these barriers, a number of gaps and inadequacies remain. The following section outlines these activities, upon which this project builds.

II. Project Strategy

75. The project will build capacities for sustainable land management, and develop and implement a coherent institutional, policy and legal framework focused on mainstreaming SLM into government planning and development. Particular attention will be given to clarifying institutional mandates and responsibilities. Capacity-building activities will be directed to enabling relevant government agencies, civil society organizations, and user groups to more effectively manage land resources in an environmentally friendly and sustainable manner.

76. An important output will be to develop and test a strategy for sustaining the country's efforts to prevent land degradation and encourage SLM practices. The mainstreaming of these issues will ensure their inclusion in the MTSEPF, which is a tool used by the Government that identifies high priority national development issues, thereby ensuring funding through budgetary support and donor funding. In addition, a Medium-term Investment Plan will be developed to provide the resources for ongoing work in the area of SLM

77. In the absence of this project, the existing set of land management activities would continue. Land management would continue to be of limited effectiveness due to inadequate coordination and linkages in the policy and institutional frameworks. Inadequate rehabilitation and poor agricultural practices would continue to result of further land degradation and deforestation. Agriculture will continue to be of minimal input in the livelihoods of the rural poor, increasing the pressure of rural communities on the land, particularly on steep slopes. Overall, deforestation and the loss of biodiversity will continue at a greater rate than without the project.

Project Description

A. Baseline activities in support of sustainable land management

78. Several government agencies and organizations within the country are working on the development of policies that promote sustainable land management. Those policies described in Section D.1, Policy, Institutional and Legal Context, represent important baseline activities to this project. The NCSA determined that this policy framework for natural resource management and economic development was sufficient to help Jamaica fulfill obligations under the CBD, CCD and FCCC.

79. However, policy implementation remains a challenge. Government activities are often localized and are being carried out in isolation from each other, with little communication and coordination. Often, implementation is weak due to factors such as, low political priority, lack of resources, inadequate cross-sectoral coordination, and decentralized authority. Institutional deficiencies and gaps include:

- a. Policy formulation from concept to implementation is not of high quality;
- b. Inadequate policy implementation at the local level;

- c. Insufficient programme coordination among and within the relevant agencies, including cooperation and collaboration in project development;
- d. Insufficient and unreliable information on the costs of effective policy implementation; and
- e. Poor financial planning and management.

80. The NCSA findings on land degradation and sustainable land management in Jamaica suggest that effective implementation of the country's various natural resource and development policies could contribute significantly to help addressing some of the effects of land degradation and promoting SLM. However, no policy document clearly recognizes or addresses either the causes or effects of land degradation, or deals with the inter-relationships between land use, agriculture, mining and rural development. For example, no linkages, synergies or overlaps have been identified or addressed among the NLP, Draft Sustainable Rural Development Policy (2004) and the Agricultural Development Strategy (2005).

81. The MAL is executing the Land Administration and Management Programme (LAMP), which was established in 2003 to implement critical aspects of the National Land Policy. LAMP is jointly funded by the Inter-American Development Bank (IDB) and GoJ has three major components: public land management, a land registration component, and land information management at a total cost of US\$ 12 million.

82. Begun in 2001, the Agricultural Support Services Project (ASSP) is a US\$ 31,500,000 project that was extended to February 2008. The aim of the ASSP is to enhance the competitiveness of Jamaican agriculture in domestic and global markets. The ASSP is being financed by a US\$ 22 million loan from the IDB, with a contribution of US\$ 8.6 million from the GoJ. The component of this project that more directly contributes to the baseline of this project includes activities to develop the critical capacity for delivery of effective agricultural support services including agricultural extension, research, marketing and strategic information, to producers and exporters. US\$ 6,000,000 of this financing is for high pay-off productive projects (the cost of the 45 projects already funded in these areas is US\$ 515,000), such as exotic vegetables and honey production, and US\$ 1,000,000 for agricultural extension services¹².

83. Additionally, to help address the issue of land for the landless (especially graduates from agricultural colleges that target the rural poor, women and youth), the GoJ launched the Emancipation Lands Programme (ELP) in 1997 to provide lands to the poor in accordance with the National Settlement Strategy and the national land and industrial policies. Parcels of government-owned lands were identified in each parish to facilitate and encourage various forms of development. Development options have focused on housing and agriculture. The ELP is also intended to prevent speculation, fragmentation or conversion of agricultural lands to non-agricultural use.

84. The Ministry of Agriculture and Lands, in collaboration with other agencies, was mandated to manage the planning and implementation of the agricultural component of the programme.

¹² The US\$ 1,000,000 for agricultural support services is considered as baseline to this project, with the balance of the ASSP of US\$ 30,500,000 as associated financing.

Implementation of the ELP was stalled from a lack of funding for surveying, subdivision, management personnel, and start-up capital for farmers, among other constraints. While land tenure is recognized as an important issue, providing titles to land goes beyond the scope of this project.

85. The MAL also enjoys support from the Food and Agricultural Organization (FAO) on a regional project, “Promoting CARICOM/CARIFORUM Food Security”. The first phase of this project was designed to increase agricultural productivity in the targeted communities of Vineyards in St. Catherine, Morant in Clarendon, Spring Gardens in Portland and selected bauxite lands in St. Ann. These four small irrigation projects will help 69 farmers on 27.5 hectares through the introduction of improved water management techniques.

86. The Rural Enterprise Agriculture and Community Tourism (REACT) project is a joint GoJ/USAID implemented by the MAL and designed to address issues associated with rural poverty and economic growth stimulation, through the development of environmentally sound rural enterprises. REACT will take a collaborative approach to rural economic development, by mobilizing targeted communities, public institutions, non-governmental organizations, and the private sector to support demand-driven interventions that contribute to sustainable rural economic development.

87. The Forestry Department continues to focus on the implementation of the National Forest Management and Conservation Plan with the support of the Canadian International Development Agency (CIDA), the Trees for Tomorrow Project. The goal of the project is to improve the management and conservation of forests and tree crops for the sustainable benefit of the people of Jamaica. The FD has benefited from institutional strengthening in forest and watershed management, the latter carried out as a pilot project in Buff Bay’s Pencar Watershed Management Unit. Lessons learned from this exercise will be extended to other watersheds as resources become available.

88. The Forestry Department is also partnering with the FAO in the National Forest Programme Facility (NFPF) through a three-year agreement signed in 2004. The main purpose of this programme is to enable and assist forest stakeholders to contribute to the development of a national forest programme. Through a debt-for-nature swap, the GoJ established a US\$ 16 million Forest Conservation Fund Group to support forest management. The fund will target 3,500 hectares to be reforested, increasing public awareness and engagement in forest conservation, expanding the forestry database, and providing training on scientifically sound best management practices. The beneficiaries of the Fund are NGOs, CBOs, universities and other research institutions, and non-profit organizations.

89. The Water Resource Authority (WRA) is currently developing a national Water Resources Master Plan (WRMP). A first plan was completed in 1990, and the second Plan was completed in 2005. The WRA works closely with the NIC in developing the projections for the demand of irrigation water. The NIC is located within the MAL. While the country has adequate water resources for the next twenty years, the issue of distribution remains a challenge for both potable and irrigation water.

90. Access to water is a barrier to agricultural productivity, and therefore a contributor to rural poverty. In May 2005, the NIC signed a US\$21 million loan agreement with the Inter-American Development Bank (IDB) to execute specific projects within the National Irrigation Development Programme (NIDP). The NIDP involves the construction and rehabilitation of irrigation works, the purpose of which is to increase high value agriculture and farmers' income, and contribute to increasing the area under improved irrigation management. The NIDP should help slow the decline in agriculture and increase revenue-generating opportunities in areas where availability of water is a constraining factor. However, very little progress has been made to implement the NIDP.

91. With the support of the Caribbean Development Bank (CDB), the NIC has embarked on three pilot projects in the parishes of St. James and St. Elizabeth to construct irrigation infrastructure. The project is valued at US\$ 3.25 million. While the NIC has been able to address some infrastructural needs for large-scale irrigation systems, irrigation methodology for small-scale farms still needs to be demonstrated.

92. One of the objectives of the National Land Agency's 2006-2009 Corporate Plan is to improve the National Spatial Information System and the collection and management of land use data. Currently, approximately 135,000 parcels of land in Kingston and St. Andrew, and St. James are in the database, representing 20 per cent of the parcels of land island-wide. In order to enable planning for development in a more orderly fashion, the NLA is in the process of preparing a digital map, which shows land ownership boundaries, values and all other related information on a particular parcel of land. However, the NSIS does not provide information on categories of land-use and their impacts on land degradation.

93. In addition to the large projects related to SLM described above, there have been many small-scale interventions related to SLM at the community level. Several Environmental NGOs and community groups have carried out projects with farmers to manage land and environmental resources, and have been funded by the Environmental Foundation of Jamaica (EFJ). EFJ was established in 1993 and makes grants to NGOs and academic institutions in Jamaica for environmental projects and child welfare. Numerous projects related to agriculture have been supported over the last decade. The Jamaica Agricultural Society was founded in 1895 and is the lead organization working with farmers nationally, and provides services for agricultural development and the improvement of the standard of living of farmers. Members of umbrella NGO groups such as the National Environmental Societies Trust and the Association of Development Agencies also work with rural communities and with farming interests. Formed in 1987, the National Environmental Societies Trust (NEST) is an umbrella group for environmental NGOs and advocates policy development and other national issues. The Association of Development Agencies promotes sustainable development and social change, creating a framework for debate, policy advocacy and analysis.

94. These have not benefited from a free exchange of lessons learned and best practices. Notwithstanding, the programmes undertaken by environmental NGOs and community groups to educate farmers on improved land management practices are also important baseline activities. The Jamaica Conservation and Development Trust (JCDDT) is one such NGO responsible for the management of the Blue Mountain and John Crow National Park, the recurrent expenditure of

which is approximately US\$ 367,000. In addition to this, the JCDT's 2005-2010 five-year programming budget includes US\$ 633,000 for reforestation and forest rehabilitation activities, community sustainable livelihoods training, a public education campaign, community projects and training on wildlife and land conservation practices, and research.

B. Capacity and mainstreaming needs for sustainable land management

95. As part of the National Capacity Self Assessment Project (NCSA), the GoJ undertook an evaluation of national efforts to meet obligations under the Rio Conventions. In May 2005, the GoJ produced the NCSA Thematic Assessment on Land Degradation, which identified priority recommendations to address the inadequate capacities related to the institutional, policy and legal framework for land degradation¹³. Three examples are:

- Undertaking a comprehensive assessment of the factors that cause drought and the mapping of drought areas as the basis for the expeditious development of and the periodic review of the NAP and Jamaica National Environmental Action Plan (JNEAP)¹⁴ for the country;
- Provision of capital funds to allow the implementation of critical projects; and
- The development of effective and comprehensive agricultural and land use policies.

96. The NSCA found that the development of strong institutions required not only that capacity issues be addressed but also strong, committed and accountable leadership at all levels of the institutional framework. The major NCSA recommendation is the need to strengthen the institutional coordination mechanisms that should result in more effective programme implementation.

97. The country needs to strengthen the institutional policy and legal framework for sustainable land management as well as develop its capacities at all levels to provide feasible technical solutions to the issues that affect land degradation. Although Jamaica has ratified the UNCCD in 1997 and has named a Focal Point Institution (MLGE), nine years after signing the Convention the country has yet to name an institution to direct and coordinate the country's response to the UNCCD and the promotion of SLM. The development of more in-depth information on thematic areas of land degradation within the country through sector specific sources, formation of sector specific working groups, and mechanisms to update the current status of land degradation in the country remain outstanding. These gaps have resulted in a failure to strengthen and build capacity within the relevant organizations, and consequently no coherent and effective mainstreaming of SLM has taken place in policies, regulations, strategies, plans, and public education.

98. The consultations leading to the preparation and approval of the NAP have run parallel to the consultations for the development of this SLM MSP, notably through the overlap in membership between the Land Degradation and Drought Management Committee and the CCD Working Committee established under the NCSA. During the month of September, the national validation workshop will take into consideration the various programmes and projects currently

¹³ [Annex 3](#) is the Executive Summary of the Thematic Assessment on Land Degradation undertaken as part of the NCSA project. This Annex contains the full set of recommendations to address Land Degradation.

¹⁴ See paragraph 36.

underway and those pipelined with a view to assessing realistic implementation of the NAP within the framework of the CCD Third National Report. A central outcome of this project is to facilitate, indeed catalyze, policy and programme coordination between key stakeholder agencies and organizations to meet the objectives of sustainable land management as set out in the CCD and as recommended through the various consultations and workshops that contributed to the development of the NAP and CCD 3NR. Specifically, activities under output 1.4 (paragraph 116) are designed to integrate roles and responsibilities for the implementation of the CCD NAP (in addition to the role of the Project Steering Committee (paragraph 157) that will oversee consistency between project implementation and the objectives as stated in the CCD 3NR and NAP).

99. The GOJ has several policies (Forestry Policy, Draft Sustainable Rural Development Policy, Agricultural Development Strategy, Draft Watershed Management Policy, and Water Sector Policy), that, while identifying the issues, have been relatively ineffective in creating an enabling environment to solve the problems of declining agricultural productivity, rural poverty and drought management. SLM is not mentioned in any of the policies. There is a need to build (individual, institutional and systemic) capacities that will enable the country to break the cycle of policy paralysis and move to a coherent and effective policy framework that can be feasibly implemented.

100. The country's agricultural sector is dependent on rainfall for its survival as only 10% of arable lands are irrigated. While the NIC has developed a plan to irrigate most farming areas, little has been implemented. Some of the significant challenges are how to deliver irrigation water to small farmers and develop small-scale irrigation systems in a cost effective way. Rainfall harvesting is part of the country's traditional knowledge that has been dying and given the small farmer's reliance on rainfall the technology needs to be revitalized and demonstrated as an effective small-scale irrigation system. Additionally, the country needs to strengthen its capacity to manage drought through the development of a drought early warning system.

101. The economies of most rural Jamaican communities have agriculture as their basis. The decline of agriculture has led to increased rural poverty and patterns in human behaviour, resulting in the loss or degradation of natural resources, including the forest from which many resources are extracted (e.g., yam sticks, timber and fuel wood). Agroforestry has been identified as a farming method that can meet the short-term need for cash while at the same time reducing soil erosion and promoting ecosystem services. However, expertise in agroforestry needs to be built at national and community levels and suitable technology and methods should be placed in the hands of farmers.

102. To improve the effectiveness of government agencies such as the MAL, the FD, the NIC, RPPD, RADA and JBI, training and human resource development is needed in several key areas. This would include training in land information systems, land management information systems, land zoning, land rehabilitation techniques, GIS, GPS, river training, soil conservation, agro forestry, drought modeling, hydrometrology, etc. Where there exists some level of expertise there is also insufficient experience in implementing or adapting appropriate SLM in the field. The need for training is significant and must be addressed as part of a programme to build capacity in key organizations and user groups. The approach to training must include both

theoretical and practical approaches such as demonstration sites if the training needs are to be appropriately addressed.

103. In summary, several organizations within the country are working on the development of policies that potentially contribute to SLM, some baseline activities are taking place on the ground particularly in irrigation, while pilot and small-scale projects are being implemented and planned in diverse places. However, these activities are being carried out in isolation from each other with little communication among the actors and without the direction and resources that an overall framework to develop and promote SLM could provide. [Annex 3](#) and [Annex 4](#) provide further details on the individual, institutional and systemic capacities.

C. Project rationale and objective

104. In the absence of GEF support, the status quo of policy gaps and institutional weaknesses to implement SLM will continue. Fragmented decision-making and conflicting and overlapping policy implementation will continue to constrain appropriate land management practices and contribute to wasteful use of limited financial resources.

105. The agricultural sector, which has been in decline for the last 25 years, will continue to decline with lower yields, less acreage cultivated, under-utilization of arable lands, illegal slash and burn, planting on relatively steep slopes (using poor farming practices), continued conflicts over land tenure for small farmers, and limited irrigation of agricultural landscapes. As the mainstay of many rural communities and catalyst for rural development, the decline in the agricultural sector will forebode further increases in rural poverty, rural-urban drift, illegal cultivation of land, informal housing, and illegal resource extraction from forested areas. The decline in the agricultural sector also has serious consequences for the decline of the forestry sector as timber and fuelwood are illegally removed, and slash and burn cultivation resulting in many fires on an annual basis.

106. In the absence of improved methods and capacities for mineral ore extraction, mining will also continue to increase land degradation. Currently, less than 15% of mining sites are rehabilitated, the relative poor quality of which limits their potential uses. Given the importance and locations of bauxite and limestone mining in Jamaica, the un-rehabilitation of these sites will continue to increase land degradation and further constrain the potential of the agricultural and forestry sectors.

107. Exacerbating the decline in the agricultural sectors, there will be increased competition between housing and agricultural lands in the absence of a holistic, realistic policy and strategy for sustainable land management. Housing developments will thus continue to be sited on prime agricultural lands as farming is relegated to marginal lands.

108. While Jamaica does not lack policies, there is a need for harmonization, which will not take place in the absence of this GEF project. The many plans and strategies developed for water supply and irrigation, forestry, agriculture, and housing will continue to exist, but they will have limited implementation, in part from a lack of funding, but also due to challenges in competing national priorities, commitment and leadership. This GEF project is expected to catalyze

national commitment with the injection of limited funding for strengthening national capacities for sustainable land management.

109. The objective of the GEF focal area on Land Degradation, and specifically GEF Operational Programme 15 is “to mitigate the causes and negative impacts of land degradation on the structure and functional integrity of ecosystems through sustainable land management practices as a contribution to improving people’s livelihoods and economic well-being.” With the objective of this project to develop a coherent institutional framework and capacities for sustainable land management, this project is eligible for GEF support. In particular, this project will help GEF meet programme outcomes by helping Jamaica strengthen coordinated efforts to combat land degradation, and removing the barriers to sustainable land management by demonstrating economical feasible alternatives to rural communities (e.g., small-scale irrigation, re-vegetating quarries, and agro-forestry). Given the strategic focus, this project is designed to meet Strategic Priority SLM-1, Targeted Capacity Building.

110. This project is part of the UNDP/GEF LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management (Portfolio Project). The programmatic objectives of the Portfolio Project are to identify critical barriers to preventing land degradation and mainstreaming sustainable land management into national development decision-making and planning. In particular, the present project proposal will help meet two of the outcomes called for in the portfolio project, namely:

- Enhanced individual and institutional capacities for SLM
- Systemic capacity building and mainstreaming of SLM principles

111. This project’s long-term **goal** is to prevent and arrest land degradation by institutionalizing sustainable land management practices in such a way that national socio economic priorities are met while at the same time contribute to achieving the objectives of the CCD. The **objective** of this project is to integrate sustainable land management within decision-making and development planning and strengthen capacities to implement best practices for sustainable land management and thus contribute to halting and reversing land degradation trends.

D. Expected Project Outcomes and Outputs:

112. Two main outcomes and associated outputs are expected from this project: Mainstreaming sustainable land management into national policies and institutions; and strengthening institutional capacities for the implementation of sustainable land management. The Provisional Work Plan (Section II.B) provides further information of project outputs by activity and their respective scheduling. A third outcome serves to facilitate adaptive project management through monitoring, evaluation and sharing of lessons learned.

113. **Outcome 1:** Sustainable land management is mainstreamed into national policies, plans and institutions. This outcome sets out to remove barriers that result in fragmented, overlapping, and weak policy and institutional framework for SLM. Project outputs under outcome 1 are designed to address the systemic (outputs 1.1, 1.3 and 1.5) and institutional (outputs 1.2, 1.4, and 1.5) challenges to sustainable land management.

- Output 1.1: Policy and regulatory frameworks reviewed and assessed to identify gaps, weaknesses and barriers to a coherent and effective enabling environment for SLM
- Output 1.2: Institutional capacities of key GoJ and civil society organizations that play a role in SLM assessed and capacity building needs defined
- Output 1.3: A cohesive framework policy for sustainable land management developed.
- Output 1.4: Strengthened institutional mandates, roles and responsibilities for combating land degradation will be negotiated, building upon the assessments and recommendations of outputs 1.1, 1.2, and 1.3.
- Output 1.5: A Medium-Term Investment Plan (MTIP) will be developed to catalyze the implementation of the CCD NAP and sustainable land management options.

114. The activities to be performed in achieving Outcome 1 will have five main outputs. Output 1.1 will involve key organizations working in the area of land management to undertake an assessment of the existing policy and legislative framework governing the management of land resources. Output 1.2 will be an institutional assessment of roles and responsibilities that these key agencies and organizations play in implementing various policies that affect land management. Mandates and associated capacities will be assessed.

115. Building on outputs 1.1 and 1.2, output 1.3 calls for development of an overall coherent policy framework that will provide a more efficient and effective enabling environment for the implementation of sustainable land management. This includes integrating sustainable land management and the CCD NAP into relevant policy frameworks, economic instruments and planning processes.

116. Activities to produce output 1.4 will involve negotiating a re-organization of mandates, roles, and responsibilities, including the re-organization of relevant committees, and the introduction of mechanisms for monitoring and reporting. This will include government agencies, non-governmental organizations, private sector, civil society as well as inter-organizational committees. This output will include integrating roles and responsibilities for the implementation of the CCD NAP. For example, the project will strengthen the mandate of the NSIS to include land-use information that identifies, quantifies and qualifies various categories of land degradation.

117. Outputs 1.1 – 1.4 above will serve to institutionalize sustainable land management as an integral component of development planning through policy frameworks such as the Medium-Term Socio-Economic Planning Framework and as a corporate role and responsibility by government agencies such as the Planning Institute of Jamaica (PIOJ).

118. Output 1.5 will be the development of a medium-term investment plan (MTIP), which will serve to identify sources of finances for the implementation of SLM within the framework of the CCD NAP. In particular, the MTIP will detail the negotiated financing to replicate and/or extend the demonstration projects outlined in output 2.4 below. The MTIP will be a strategic document that will complement CCD NAP funding and implementation priorities through negotiated commitments of government budgetary appropriations and external donor support.

119. **Outcome 2:** Capacity for the management and application of SLM is developed and enhanced. This outcome sets out to remove the barriers associated with low public awareness and technical capacities to pursue SLM, including insufficient economic incentives to pursue these.

Output 2.1: Identification of training and sensitization needs in SLM skills based on an assessment of current land-use practices.

Output 2.2: Training programme and associated material on best practices for sustainable land management developed.

Output 2.3: SLM training implemented through policy dialogues and training workshops.

Output 2.4: Five (5) demonstration projects designed and implemented.

120. Outcome 2 serves to strengthen the national institutional capacities to implement sustainable land management, specifically to apply best practices associated with soil conservation, agro-forestry, land rehabilitation, and small-scale irrigation.

121. Output 2.1 will involve a review of current land-use practices, as well as past and current training and public awareness programmes related to SLM. This assessment will include a survey of past stakeholders, recipients and beneficiaries of such programmes to determine their effectiveness and thus improve their reach and sustainability, and provide the basis for identifying training and sensitization needs in SLM skills. Building on output 2.1, output 2.2 will review relevant and applicable best practices for SLM in the region and elsewhere, integrate these into a training programme on SLM. Particular attention will be given to the implementation of this programme as a collaborative effort among key GoJ agencies, private sector, academia and NGOs. Building on output 1.2, assess public awareness and undertake an in-depth analysis of the training necessary to institutionalize strong values, attitudes, behaviour, as well as technical capabilities in pursuing SLM

122. Output 2.3 will focus on implementing the SLM training programme through policy dialogues and training workshops with decision-makers, community leaders, private sector and NGO representatives, and other key stakeholders. Policy dialogues will serve to build greater awareness and strengthen collaboration among decision-makers and stakeholders on the importance of SLM and the alternative strategies proposed by the project. The project will also train trainers to help implement the SLM programme produced in output 2.2. With a cadre of SLM trainers, workshops will provide training on the more technical aspects of SLM best practices associated with the demonstration projects (output 2.4). Training will not be segmented by ministry or agency, but rather by type of land use and sector. Training of SLM will be centralized within a particular agency or organization based on the institutional review of output 1.2 and agreed by the PSC.

123. Much of the training on SLM will be provided through five demonstration projects. These projects will provide first hand experience on the SLM. Part of the capacity building strategy is to implement five demonstration projects on the application of best practices for sustainable land management. As part of the each demonstration project, a small component will include mapping the current land use practices particular to each demonstration site. The demonstration projects will be executed by the existing staff of relevant organizations, supported by project funding. The demonstration projects will involve:

- a. A small-scale irrigation system for farmers will be established using rainfall harvesting as the method to harness the water and incorporating appropriate cultural and water conservation practices. The demonstration will be conducted on a two-hectare site in St. Elizabeth, an area that has a strong farming community. The organizations involved will be RADA, NIC, the farming community and local farming organizations (US\$ 20,000).
- b. Other countries have re-vegetated quarries using various techniques, one of which has been selected as appropriate for adaptation to Jamaican conditions. The demonstration project will learn from this approach and apply it in the rehabilitation of one hectare of a limestone quarry. The organizations involved include the Ministry of Mines and Geology, MAL, and quarry operators (US\$ 30,000).
- c. Rehabilitation of bauxite mined out pits. Current FD research indicates that mined-out lands do not spontaneously re-vegetate. On two hectares of mined-out land, the project will investigate the method and depth of soil spreading during post-mining reclamation, nutrient status of reclaimed soils, the re-establishment of rarer indigenous species, and understanding the natural succession process. The organizations involved include the FD, JBI, NGOs and a bauxite company (US\$ 25,000). Lessons learned from this demonstration project will increase the options and best practices for rehabilitating other mined out lands.
- d. Agro-forestry is an approach that has been identified to reduce forest loss and provide sustainable livelihoods options for small rural farmers. The demonstration project will involve establishing agro-forestry plots in the Rio Minho Watershed working with five farmers. Through a training workshop, lessons learned from this demonstration project will be used to promote the more extensive practice of agro-forestry. The organizations involved include the FD, RADA, and community groups (US\$ 20,000).
- e. Demonstrating SLM practices on land leased under the ELP is expected to help address issue of land tenure in Gilnock, St. Elizabeth and encourage farming on such lands. The organizations involved include MAL, MLGE, RADA and the Gilnock community (US\$ 60,000).

124. Outcome 3: Monitoring, Evaluation, Lessons Learned, and Adaptive Project Management: This outcome includes the preparation on evaluation reports that assesses project outputs, such as the SLM training programme, demonstration projects, the MTIP and the overall project. The preparation of lessons learned material and their dissemination are other outputs included in this outcome. Adaptive project management includes these and other activities that serve to assess changes in the systemic environment and modify project activities to ensure efficient, effective and timely delivery of project outputs. The preparation of management and progress reports, such as the APR and quarterly operational reports are included in this outcome.

E. Global and local benefits

125. The project will increase synergies and financing for SLM that, when implemented will indirectly improve global benefits. The proposed demonstration projects will directly contribute to global benefits through improved forest cover, which will increase carbon sequestration, and improved integrated management of land resources to prevent land degradation. In particular, global benefits include:

- Maintenance of the critical structure and functions of ecological systems;
- Enhanced biodiversity conservation due to reduced deforestation and reduced sedimentation loads in lagoons and coastal areas including coral reefs; and
- Enhanced carbon sequestration resulting from increased land rehabilitation through afforestation and reduced deforestation.

126. Project activities will also deliver important national benefits through enhanced capacities for sustainable land management, rural development and drought management. A key national benefit is increased cost effectiveness and reduction of duplicative efforts through synergies developed through the mainstreaming process. Other national benefits include:

- Enhanced agricultural productivity;
- Improved rural development strategies;
- Protection of watersheds;
- Conservation of biodiversity;
- Reduced risks of natural disasters, e.g., drought; and
- Reduce rural to urban immigration.

F. Linkages to Implementing Agency activities and programmes

127. The GEF Small Grants Programme (SGP) operates in Jamaica, with support from UNDP. The SGP is a US\$ 200,000 per year programme that has been in operation since 2004, and has since provided US\$ 24,000 and committed US\$ 366,000 to NGOs and CBOs in the three GEF focal areas. For example, the JCDDT received US\$ 24,865 through the SGP to address the problems of land degradation and habitat loss caused by deforestation related mainly to conversion of forest to agriculture, and inappropriate farming practices, in targeted buffer zone communities around the Blue Mountains and John Crow National Park. The Negril Area Environmental Protection Trust also received US\$ 22,580 through the SGP to establish an integrated forest management program within the Fish River Hills through community empowerment and collaboration. A third recipient, the Portland Environment Protection Association, received US\$ 24,850 to promote sustainable community-based watershed management practices in the Drivers River watershed. Other recipients include community-based organizations, such as the Bowden Pen Farmers' Association.

128. UNDP and UNEP are managing components of a US\$14 million GEF grant in support of a Caribbean-wide programme on integrated watersheds and coastal area management (IWCAM). The five-year programme will support institutional strengthening, sharing of lessons learned and knowledge management, resource assessments, and community demonstration projects. UNDP will implement the demonstration projects component, which will include a US\$ 500,000

watershed project in the northeastern part of Jamaica. Finally, UNDP is working with NEPA and the Office for Disaster Preparedness and Emergency Management (OPDEM) on mainstreaming various aspects of disaster risk reduction in Jamaica, including environmental planning and permitting, and training. The emphasis in this programme component is to improve environmental management in areas where this can reduce the risk of disaster due to natural hazards.

129. In addition to participating in the regional components of the project, NEPA will also develop a demonstration project that will aim to capture existing best practices and lessons learned through other coastal, watershed and community management initiatives within the country to create an effective Watershed Management Mechanism for Eastern Portland.

G. Stakeholder Involvement¹⁵

130. The key stakeholders identified in this project include government ministries and agencies, farming groups, communities, civil society organizations and resource users. As the focal point institution for the CCD, the MLGE will play a central role in mainstreaming sustainable land management into national policy, plans, strategies and programmes. A number of the Ministry's departments and agencies such as the Land Management Units, the Mines and Geology Division, the Metrological Services and the National Environment and Planning Agency (NEPA) all have mandates that directly relate to SLM. The Ministry of Agriculture and Lands and the Ministry of Local Government and Environment will work especially closely to identify the gaps, overlaps and policy conflicts regarding land use with a view to helping harmonize the policy and regulatory framework for SLM (output 1.1).

131. The Ministry of Agriculture and Lands is a critical stakeholder and many of its divisions, (the Forestry Department, Rural Agricultural Development Authority (RADA), Rural Physical Planning Unit (RPPU), National Irrigation Commission (NIC), and the Policy and Planning Division) have mandates and responsibilities that are related to SLM. The Forestry Department (FD) will be the lead executing agency and will house the Project Management Unit (PMU). The FD will liaise with other agencies under the aegis of the MAL and those of the MLGE, farmer organizations as well as relevant groups from civil society in implementing all activities under the project.

132. Two other important ministries are the Ministry of Industry, Technology, Energy and Commerce (MITEC) and Ministry of Tourism, Entertainment and Culture (MTEC) as both are responsible for important economic sectors that affect policy decisions on land resources. These two ministries and their relevant agencies will be important participants in the Project Steering Committee.

133. Civil society will provide input in policy review and harmonization. Civil society groups will also be able to provide lessons learned and build on their experience in training and demonstration projects and in dealing with issues related to land tenure. While the geographical areas from which the groups will be drawn have been identified, the groups have not yet been

¹⁵ Annex 6 details the expected roles of stakeholders in project implementation.

selected. Partner civil society groups will be selected jointly by relevant Government agencies, the EFJ, the Jamaica Agricultural Society and umbrella NGO groups such as the National Environmental Societies Trust and the Association of Development Agencies.

134. The Ministry of Housing, Transport, Water and Works (MHTWW) will be involved in the review of the Water Sector Policy to identify policy conflicts with SLM. Experiences from MHTWW and WRA staff will be important in the identification policy resistances arising from the implementation of water policy, as well as the institutional and human capacities needed to achieve SLM. An agency of the MHTWW, the Water Resources Authority (WRA) will receive training on best practices for integrated land and water resource management.

135. As a key organization in guiding Jamaica's development, the PIOJ will play an important role in the policy review and harmonization process. The PIOJ is currently the lead organization with respect to the finalization of the Sustainable Rural Development Policy (SRDP) and the development of its action plan.

136. With responsibility for overseeing bauxite mining and land rehabilitation plans, the Jamaica Bauxite Institute (JBI) will receive training as part of a demonstration project to restore mined out bauxite lands. Since current methods tend to limit the uses to those lands that can be rehabilitated, training will be focused on developing new and improved sustainable uses for rehabilitated mined-out bauxite lands.

137. The Forestry Department will establish a Project Steering Committee (PSC) with broad and representative membership in order to ensure full consideration of land degradation issues as well as to ensure cross-sectoral integration. See project implementation arrangements for further details.

138. Key stakeholders were consulted throughout the project development process. Consultations included focus group meetings that review issues and recommendations that emerged from national consultations to prepare Jamaica's CCD NAP¹⁶. Consultations with key stakeholders helped identify the root causes of land degradation, barriers to sustainable land management, and recommend possible solutions. A national workshop discussed and agreed on the project strategy, outcomes, outputs, and activities. Participants also reviewed and made recommendations for the design of the demonstration projects.

¹⁶ CCD Workshop, Development of Jamaica's National Action Programme (NAP) , January 2006

Risks and Assumptions

139. The main risk to this project is that jurisdictional management by government agencies will not easily facilitate inter-agency policy coordination and implementation. The second important risk to project success lies in the commitment of financial resources to the key institutions mandated to implement SLM. There is an implicit assumption that the Government of Jamaica will remain committed to meeting its obligations under the CCD, and demonstrate long-term political commitment to SLM by allocating the recommended budgetary allocations to agency SLM programmes and projects. Another project assumption is that all key stakeholder organizations remain committed to collaborate on integrated approaches to sustainable land management, including sharing information pertinent to SLM. Paragraphs 6 – 10 in Annex 8 further elaborate project risks and assumptions.

Financing Plan

A. Streamlined Incremental Cost Assessment

140. **Global Environmental Objective:** This project supports the global environmental goal of the SLM Portfolio Project¹⁷ by promoting sustainable land management for global and national benefits. The global environmental objective of the project is to strengthen the policy and institutional framework and the requisite technical capabilities to implement sustainable and integrated land management. The global environmental benefits that will accrue from this project will be in the form of a) improved carbon sequestration through the demonstration projects that will result in reforestation/afforestation; b) increased ecosystem productivity and resilience through reduced pressures on water supply and adoption of sustainable land management practices that reduce soil erosion; and c) reduced loss of habitat due to deforestation.

141. As Jamaica's capacities for implementing sustainable land management increase through this MSP, the ensuing planned outcomes of reduced land degradation match the SLM Portfolio Project's aims by contributing (indirectly) to long-term increases in carbon sequestration.

142. **Systems Boundary:** The project will focus on reconciling the overlapping policy frameworks and institutional roles and responsibilities among the government agencies within the MAL and MLGE, as well as those of non-state actors such as the private sector, research institutions, non-governmental organizations and civil society groups and associations. Other government agencies will necessarily contribute to the rationalizing and harmonizing of the framework policy for SLM, such as MITEC. The policy and institutional framework for SLM will be supported by training on sustainable land management practices to prevent and rehabilitate important ecosystems and habitats affected by bad land use practices. The project will focus on best practices for water conservation, rehabilitation of limestone and bauxite quarries, agro-forestry, and promoting SLM best practices on leased land. Two types of training activities will be held. One will be training to technical officers in relevant government agencies to understand and incorporate best practices for SLM within their programme of work. The

¹⁷ “GEF-UNDP Targeted Portfolio Project on Capacity Building and Mainstreaming of Sustainable Land Management (SLM) for Least Developed Countries (LDCs) and Small Island Developing States (SIDS)”, <http://www.gsu.co.za/>

second type of training will be targeted to SLM practices piloted in the five demonstration projects.

143. Additionally, the project will strengthen the enabling environment by raising public awareness of the causes, processes and impacts of land degradation. The project will not undertake to revise legislative instruments, but limit activities to targeting effective implementation of existing laws and regulation through a new overall policy framework for SLM. The project will also not address the larger issues of land redistribution and financing small farmers.

144. This MSP will be implemented over a three-year period, with training provided to decision-makers, planners, and users of land resources, both governmental and non-governmental stakeholders. While much of the project will take place in Kingston through national consultations, policy dialogues and workshops, a number of these will take place in other parishes with parish leaders, local agencies, and rural communities. Many of these consultations and training will take place within the framework of the five demonstration projects.

Baseline activities

145. This MSP builds upon a number of baseline activities¹⁸ pertaining to land management, the financing of which are considered associated to this project's GEF increment and co-financing. The key baseline activities presented here contribute to achieving **Outcome 1, Mainstreaming Sustainable Land Management**, pertaining to the formulation of policies and plans that serve to improve land management. The estimated baseline cost of these programmes and activities are US\$ 430,000, and include:

- Preparation of the 2005-2008 Agricultural Development Strategy
- Preparation of the National Irrigation Development Plan
- Preparation of the National Land Policy
- Preparation of the National Forest Management and Conservation Plan (US\$ 100,000)
- Preparation of the National Watershed Policy
- Preparation of the Jamaica National Environmental Action Plan, which recommends corrective measures to improve land resource use and management (US\$ 30,000)
- Preparation of the 2004 Sustainable Rural Development Policy
- Preparation of the 2004-2007 MTSEPF
- RADA provides advisory services on land proposals, crop zoning, soil surveys, and land assessments for farmers
- With FAO support, the Forestry Department is executing the National Forest Programme Facility (NFPP) by enabling forest stakeholders to help develop a national forest programme (US\$ 300,000)

146. The second set of important baseline activities serve to help achieve **Outcome 2, Building Capacities for Sustainable Land Management**. The estimated baseline cost of these programmes and activities are US\$ 55,325,000, and include:

¹⁸ See Section D.3.

- NEPA undertakes a number of activities to ensure compliance with various policies and plans related to land management. In particular, NEPA facilitates extensive participation among civil society (e.g., landowners) in policy-making structures such as the National Integrated Watershed Management Council (NIWMC), Commissioner of Lands, and Parish Councils (US\$70,000)
- The ODPEM undertakes proactive measures to prevent and reduce the impact of natural disasters, including coordinating and monitoring responses and carrying out public awareness activities on all aspects of disaster management (US\$41,000)
- The NMS maintains a database that provides meteorological data that informs land management, e.g., agriculture
- The WRA maintains a database on hydrological data and provides technical assistance to help other government agencies meet manage water resources
- The NLA manages the National Spatial Information System, which is a database containing data and information on land uses
- The GOJ/IDB Land Administration and Management Programme (LAMP) is providing technical support to improve public land management, land registration, and developing a land information system (US\$ 12,000,000)
- The ASSP provides a number of agricultural support services, which include agricultural extension (US\$ 1,000,000)
- The GoJ's Emancipation Lands Programme sets out fare to provide land to the poor in accordance with the National Settlement Strategy and the national land and industrial policies
- The CARICOM/CARIFORUM Food Security project is also an important baseline activity to four small irrigation projects (US\$ 280,000)
- REACT is another important baseline activity that addresses to rural poverty alleviation
- The Forestry Department is currently implementing the National Forest Management and Conservation Plan under the Trees for Tomorrow project with CIDA support (US\$ 10,500,000¹⁹)
- Through a Debt-for-Nature Swap, the GoJ established a Forest Conservation Fund to improve capacities for forest management, including protected area protection, technical training on best management practices, and development of environmentally-friendly livelihoods (US\$ 16,000,000)
- With support from the IDB, the NIC is executing the National Irrigation Development Plan (US\$ 11,900,000)
- The NIC is executing three demonstration projects to rehabilitate and build new irrigation works (US\$ 3,250,000)
- The JCDT's reforestation and forest rehabilitation activities, 2005-2007 (US\$ 179,000)
- The JCDT's community sustainable livelihoods training 2005-2007 (US\$ 24,000)
- The JCDT's research and other projects 2005-2007 (US\$ 65,000)
- The JCDT's community projects and training 2005-2007 (US\$ 16,500)

147. The operating budgets of key government agencies responsible for land management also represent important baseline in-kind contribution to this project. Their contribution during project implementation will be reflected as in-kind project co-financing.

¹⁹ This programme was funded with CA\$ 11,415,500.

148. **The monitoring, evaluation, lessons learned and adaptive management of the project, outcome 3**, effectively has no baseline activities. Land management generally suffers from a lack of coordination and sharing of information between agencies on land management activities.

149. In addition to these baseline activities, the GoJ is currently implementing a number of other projects with GEF support, namely the preparation of the CCD NAP, a demonstration project in coastal watershed management, and has submitted a UNDP/GEF MSP project to develop and integrate natural resource valuation into planning processes. These latter activities, although not considered part of the GEF baseline, are important links to this MSP (see Section F.1).

GEF Alternative

150. The GEF Alternative builds upon the many baseline activities above. To the extent possible, this project will seek to modify baseline activities in order to improve the policy and institutional framework to catalyze sustainable land management, as well as make existing land management activities represent best practices and be more sustainable. In addition to the incremental cost of these activities being funded by the GEF, additional co-financing is being provided by the GoJ. The Provisional Work Plan provides details of project activities of the GEF Alternative.

151. **Outcome 1 – Mainstreaming SLM:** The project will begin with an assessment of the existing (fragmented) policy and regulatory framework will identify important gaps, weaknesses and policy resistances that result in poor and unsustainable land management practices. The project will also undertake an assessment of the existing institutional capacities to implement land management. Both these activities will form the basis for recommending and facilitating institutional reforms of key agencies; workshops, consultations and meetings to understand and implement new SLM institutional mandates; and developing a Medium-Term Investment Plan. At the end of the project, a national workshop will be held to deliberate the lessons learned broadly on the institutionalization of SLM practices and the extent to which the GEF project has contributed to this goal. This workshop will also serve to reinforce commitments to further strengthen roles, responsibilities and mandates that will catalyze sustainable land management. The GEF contribution is **US\$ 106,250** with co-financing from the GoJ/PIOJ for the preparation of the Medium-Term Investment Plan (**US\$ 50,000**), for a total of **US\$ 156,250**. The latter government co-financing represents staff time and resources (recurrent costs) committed to this outcome, as negotiated during project development.

152. **Outcome 2 – Building SLM Capacities:** There are significant baseline activities related to capacity building in management, application and adaptation of SLM. The activities include: (a) execution of needs assessment for defining the training and sensitization needs in SLM skills, and of criteria for selection of stakeholders; (b) conducting training seminars and workshops; (c) developing a cadre of trainers; and (d) designing and implementing demonstration projects to develop technical capability. The GEF contribution is **US\$ 274,000** with co-financing of **US\$ 316,000** from the JCDD, for a total of **US\$ 590,000**. This co-financing will be used to carry out its public education campaign on natural resources management, community projects and training in land management, community sustainable livelihoods training, research on natural resource management, and reforestation and forest rehabilitation in the Blue Mountains and John Crow National Park.

153. **Outcome 3 – Monitoring, Evaluation, Lessons Learned, and Adaptive Project Management:** The effective management of the project and dissemination of results will be a key success factor and will include a number of activities mainly; a) the establishment of a project management unit; b) monitoring and evaluation of project development and impacts; c) dissemination of lessons learned and good practices (these will be prepared under activity 3.2.3); and pursuing an adaptive collaborative management approach to project implementation. The latter approach rests heavily on monitoring and evaluating the implementation of the project and ensuring that feedback is effectively used to adapt project activities in such a way that the

project's objective will be met in a cost-effective manner. This approach also warrants the active collaboration of stakeholders (those who have a positive and negative stake in the project outcomes). The project is to be managed in such a way that these stakeholders are encouraged to share their experiences and perspectives throughout project implementation, thereby ensuring valid, reliable, and legitimate information is used as feedback for the adaptation of project activities. Project outputs include progress reports (e.g., APR/PIR and TPR), independent evaluations, audits, surveys, and lessons learned.

154. This outcome is budgeted at **US\$ 214,750**, of which the GEF contribution is **US\$ 94,750**. An additional amount of **US\$ 45,000** of co-financing is provided by UNDP and in-kind co-financing is being provided by the Forestry Department in the amount of **US\$ 75,000**. The latter government co-financing represents staff time and resources (recurrent costs) committed to this outcome, as negotiated during project development.

B. Project Budget

Table 2: Project financing by Component/Outcomes

Project Components/Outcomes	GEF (\$)	Co-financing (\$)	Total (\$)
Outcome 1: Sustainable Land Management mainstreamed into national policies, plans and institutions	106,250	50,000	156,250
Outcome 2: Capacities for Sustainable Land Management developed and best practices demonstrated	274,000	316,000	590,000
Outcome 3: Monitoring, Evaluation, Lessons Learned, and Adaptive Project Management	94,750	120,000	214,750
Total project costs	475,000	486,000	961,000

Table 3: Co-Financing

Name of Co-financier (source)	Classification	Type	Amount	
			Confirmed (US\$)	Unconfirmed (US\$)
GoJ/FD	National Gov't	in-kind	75,000	
GoJ/PIOJ	National Gov't	in-kind	50,000	
UNDP	Implementing Agency	cash	45,000	
JCDT	NGO	in-kind	316,000	
PDF-A	National Gov't	In-kind	3,890	
Total Co-financing			489,890	

Table 4: Project Management financing

Component	Estimated staff weeks	GEF (\$)	Co-F (\$)	Project total (\$)
Local Consultants*	174	10,500	52,500	63,000
Office facilities, supplies, and communications		4,500	20,000	24,500
Travel (to and from demonstration project sites)		0	4,500	4,500
Venue costs for training workshops and policy dialogues and PSC meetings.		20,000	13,000	33,000
Total		35,000	90,000	125,000

* Note: Co-financing by GoJ is for the Project Assistant (150 staff weeks @ US\$ 300 per week); and by UNDP for 10 weeks for the Land Management Consultant to undertake various project management functions, including management consultations with the national executing agency. 14 staff weeks for the Lead Land Degradation Expert would be funded by GEF funds.

155. Building national capacities for sustainable land management and mainstreaming SLM within the existing policy framework is largely a process of consultation, workshops, and assessments. Thus, this project will contract consultants to undertake necessary reviews, consultations and to draft the various project outputs, such as the SLM framework policy and workshop reports.

Table 5: Technical Assistance Components (Summary) *

Component	Estimated consultant weeks	GEF (\$)	Other sources (\$)	Project total (\$)
Local consultants	320	201,000	10,000	211,500
International consultants	18	27,000	8,000	35,000
Total	338	228,000	18,500	246,500

* See Annex 7 for Terms of References for the above consultancies.

III. Management Arrangements

A. Project Implementation Arrangements

156. The project will be implemented over a period of three years beginning in September 2007. The implementation agency for the project will be UNDP. The project will be executed under UNDP National Execution (NEX) procedures. The lead executing agency for the project will be the Forestry Department. The FD will be directly responsible for the timely delivery of inputs and outputs and for coordination with all other collaborating organizations and end user groups.

157. The project will receive high-level guidance and oversight from a Project Steering Committee (PSC), established with a balanced representation from key government ministries, academic institutions, and NGOs while at the same time maintaining a limited overall membership to keep the process efficient and unencumbered. The PSC will provide the appropriate level of technical oversight to facilitate coordination, participation and sustainability of the results of the project, with particular attention to how the project fulfills obligations under the CCD through the CCD 3NR and NAP. The PSC will review and approve the annual work plan and budget. The PSC will be chaired by the Conservator of Forest and comprise members of the country's Land Degradation and Drought Management Committees. The CCD Focal Point and a representative from the UNDP will also be members of the PSC.

158. A Project Management Unit (PMU) will be attached to the Forestry Department and headed by a Project Manager, referred to in this document as the Lead Land Degradation Expert (LLDE) who will report directly to the Conservator of Forest. The LLDE will be responsible for the application of all UNDP administrative and financial procedures and for the use of UNDP/GEF funds. The LLDE will have a small support staff (administrative assistant, accountant and driver). The PMU will have overall responsibility for project management, administrative, technical and financial reporting. The PMU will manage the selection process for all contracts and recruitment of consultants in close consultation and with the approval of the Conservator of Forest, the PSC and UNDP. Criteria and procedures will be developed for performance-based contracts with service providers. Annex 7 contains the Terms of Reference for LLDE and Project Steering Committee.

159. Responsibilities for managing GEF funds will be administered by UNDP CO in Jamaica. UNDP will advance funds for a three-month period to the PMU. At the end of each three-month period, the PMU will submit a report on activities and a financial report for expenses incurred along with a request for funds for the next period.

160. The project will comply with UNDP's monitoring, evaluation and reporting requirements as spelled out in the UNDP Programming Manual. The LLDE will have lead responsibility for reporting requirements to UNDP. The project will be audited on a yearly basis for financial year January to December as per NEX procedures and Global Environment Facility requirements. The Auditor General or a suitable auditing company will conduct the audit. The Forestry Department will certify the yearly Combined Delivery Reports issued by UNDP based on financial statements prepared by the Project Accountant.

161. The UNDP CO in Jamaica will also act to provide management oversight and is ultimately

responsible for project monitoring, evaluation, timely reporting by the PMU and ensuring the submission of annual audits to UNDP HQ. The regional Coordination Unit in Panama will provide technical backstopping, UNDP GEF policy advice and trouble shooting and advisory services as necessary.

162. Mechanisms will be developed to ensure that the project receives the maximum level of recognition, commitment, support and involvement at the highest level of Government. Agreements will be made between co-financing and partner institutions to ensure full commitment and assure that the objectives of the Project are met.

163. In the case of substantial revisions of the project document, the UNDP Representative in Jamaica is authorized to effect in writing the following types of revision, provided that he has verified the agreement thereto by the UNDP- GEF unit and is assured in writing, with signatures, that the Executing Agency, project Director and PSC have no objection to the proposed changes:

- a. Revision of, or addition to any of the annexes to the project document;
- b. Revisions which do not involve significant changes in the immediate objectives, outcomes of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
- c. Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and
- d. Inclusion of additional annexes and attachments only as set out here in this project Document.
- e. Any modification of project outputs has to be approved by the UNDP-GEF; any modification of project outcomes has to be submitted for approval to the GEF Secretariat.

164. In case of minor budgetary revisions, the following will require only the approval and signature of the UNDP Resident Representative:

- a) Compulsory annual revisions, reflecting the real expenses of the previous year, duly certified by the national counterpart, and the reprogramming of unused funds for subsequent years, based on the delivery of inputs as agreed upon in this Project Document.
- b) Revisions that do not entail significant changes in the immediate objectives, outcomes or outputs of the project, but that result from a redistribution of the inputs agreed upon, or are due to increase expenses caused by inflation.

165. The substantial or budgetary revisions will be prepared by the UNDP and the PMU, in accordance with the requirements of the project itself.

166. All financial and other partners will be given due recognition. In order to accord proper acknowledgement to GEF for providing funding, 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 acknowledgment to GEF.

IV. Monitoring and Evaluation

A. Monitoring and Evaluation Plan

167. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures for MSPs under the SLM Portfolio Project and will be provided by the project team and the UNDP Country Office with support from UNDP/GEF Global Support Programme and includes the following elements:

168. The Logical Framework Matrix (attached) provides *performance* and *impact* indicators for project implementation along with their corresponding means of verification. These indicators have been derived from the *Resource Kit for Monitoring, Evaluation, and Reporting on GEF/UNDP supported Sustainable Land Management Medium-Sized Projects in LDC and SIDS countries*. The baseline situation presented in this document also utilizes these indicators.

169. Additional baseline information will be documented by PMU and submitted to the UNDP Jamaica Country Office and Project Steering Committee using the *National MSP Annual Project Review Form* in which all ‘compulsory’ and ‘optional’ questions and indicators will be completed by 1 July 2008 and updated by that date each year. The Form provides a basis for the annual review of project progress, achievements and weaknesses, for planning future activities, and to obtain lessons learned to inform adaptive management processes. It also supports UNDP Jamaica Country Office-wide reporting and planning. For the *optional* indicators, the PMU will select the most appropriate indicators for the project and include these in the form. Those indicators included in the Logical Framework Matrix are compulsory and will not be modified. Once completed, the Review form will be forwarded to the UNDP CO, which will then forward to the Global Support Unit latest by 16 July.

170. The PMU will work with the GSU and the UNDP Jamaica Country Office to complete two annual surveys that each respond to two of the compulsory indicators, which are (a) a compulsory indicator at the Objective level of public awareness regarding sustainable land management; and (b) a compulsory indicator for Portfolio Outcome 1 that requires a survey of a group of land users to determine the percentage that is satisfied with available technical support.

171. These surveys will be implemented with funding included in this MSP project budget.

Monitoring Responsibilities, Events and Communication

172. A detailed schedule of project review meetings will be developed by the PMU in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. The schedule will include (i) tentative time frames for Tripartite Reviews, Project Coordination Committee Meetings, (or relevant advisory and/or coordination mechanisms) and (ii) project related Monitoring and Evaluation activities (see Indicative Monitoring and Evaluation Budget, Table 2).

173. *Day to Day Monitoring of Implementation Process* will be the responsibility of the Project Support Unit, operating out of the PMU and based on the project's Annual Work Plan and its indicators. The PMU will inform the UNDP Jamaica Country Office of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion.

174. *Periodic Monitoring of Implementation Process* will be undertaken by the UNDP Jamaica Country Office through quarterly meetings with the project proponent, or more frequently as deemed necessary. This will allow parties to take stock and troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities. 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.

175. *An Inception Report (IR)* will be prepared immediately following the Inception Workshop and submitted within 3 months from the start of project implementation. 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 Jamaica Country Office, or the Regional Coordinating Unit (RCU) or consultants, as well as time frames for meetings of the Project Steering Committee. 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-month time frame. 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 affect project implementation. When finalized, the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond to comments or queries. Prior to this circulation of the IR, the UNDP Jamaica Country Office and the UNDP-GEF's Regional Coordinating Unit will review the document.

176. *Quarterly Operational Reports:* Short reports outlining main updates in the project progress will be provided quarterly to the local UNDP Country Office and the UNDP-GEF regional office by the project team.

177. *Technical Reports* will be scheduled 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/applicable, this Reports List will be revised and updated, and included in subsequent Annual Progress Reports (APRs). Where necessary, Technical Reports will be prepared by external consultants and will be comprehensive with 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. Information from reports will be shared with the CCD focal point and Project Steering Committee.

Annual Project Report (APR) and Project Implementation Review (PIR)

178. 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 Country Office and provides CO input to the reporting process and the ROAR (Results Oriented Annual Report), as well as forming a key input to the Tripartite Project Review. 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. These two reporting requirements are so similar in input, purpose and timing that they have now been amalgamated into a single Report.

179. An APR/PIR is prepared on an annual basis following the first 12 months of project implementation and prior to the Tripartite Project Review. The purpose of the APR/PIR is 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. The APR/PIR is discussed in the TPR so that the resultant report represents a document that has been agreed upon by all of the primary stakeholders.

180. A standard format/template for the APR/PIR is provided by UNDP GEF. This includes 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
- Annual Work Plans and related expenditure reports
- Lessons learned
- Clear recommendations for future orientation in addressing key problems in lack of progress

181. The UNDP/GEF M&E Unit will analyze the individual APR/PIRs by focal area, theme and region for common issues/results and lessons. The Reports are also valuable for the Independent Evaluators who can utilize them to identify any changes in project structure, indicators, work-plan, etc. and view a past history of delivery and assessment.

Mid Term and Final Evaluation

182. The project will be subject to two independent external evaluations. An independent external *Mid-Term Evaluation* (MTE) will be undertaken 18 months after project initiation. The focus of the MTE will be to make recommendations that will assist in adaptive management of the project and enable the LLDE to better achieve the project objective and outcomes during the remaining life of the project. The Final Evaluation will take place three months before the project is operationally closed, prior to the terminal tripartite review meeting, and will focus on determining progress being made towards the achievement of outcomes and will identify effectiveness, efficiency and timeliness of project implementation; highlight issues requiring decisions and actions; and present initial lessons learned about project design, implementation and management. 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.

Audits

183. The Government of Jamaica will provide the UNDP 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 Programming and Finance manuals. The Audit will be conducted by the Office of the Auditor General of the Government of Barbados, or by a commercial auditor engaged by the Government. The project foresees an audit to be conducted at the end of the project by a recognized national firm.

Adaptive Management

184. Lessons learned will be continuously extracted from the MSP Project. Lessons will be disseminated through Jamaica. Among the mechanisms to be used will be inter-Agency MoUs, incorporation into Annual Work Plans and through capacity development and training initiatives. As well, there will be the sharing of information between projects, stakeholders and policy representatives as an effective measure of mainstreaming. There is an opportunity during the implementation of the MSP for review of the implementation of the NAP and to take into consideration the lessons learned from the MSP.

185. The lessons learned from the MSP through evaluations will be incorporated into implementation of the MSP. In addition to the monitoring, evaluation and feedback mechanisms already identified, the Project Steering Committee will review progress on a quarterly basis, identifying lessons learned and discuss project progress with the involvement of wider stakeholder audience as necessary. The ideas and lessons learned will be incorporated into the management of the project and further implementation process by the Project Steering Committee with adjustments to the Work Plan as required.

Table 6: Monitoring and Evaluation (M&E) Plan

M&E Activity	Responsible Party (Lead in bold)	Budget (\$)	Time Frame
Inception Report ¹	Project Management Unit	1,750	At project start-up
Annual Progress Report (PIR) and GEF Project Implementation Report	PMU, FD, UNDP CO	6,000	By June each year
Tripartite meeting and report (TPR) ²	UNDP CO, FD, PMU	0	Each year on receipt of APR
Independent Evaluation of SLM Training Programme ³	PMU(LMC), FD, UNDP CO	6,000	At end of year one
Independent Evaluation of SLM demonstration project concepts ³	PMU (LMC) , FD, UNDP CO	6,000	At end of year one
Independent Mid-Term Evaluation (fee, DSA, travel)	UNDP CO, PMU (ILME 1)	15,000	At mid-point of project implementation
Independent Final Evaluation (fee, DSA, travel)	UNDP CO, PMU (ILME 2)	20,000	At end of project implementation
Terminal Report	PMU, FD, UNDP CO	6,000	At least one month before end of project
Audit ³ (3)	UNDP CO, FD, PMU	3,000	Yearly
Surveys ⁴	PMU (NRS)	9,000	Three surveys, at the outset of project implementation, mid-way through the project, and upon project termination
Lessons learned	PMU (LLDE)	5,000	3 Annual reports
Regional Lessons Learned Workshop ³	PMU, UNDP CO	12,000	Year 3
Total⁵		89,750	

1. The inception report, APR, terminal report and lessons learned reports will be financed through GEF technical assistance.

2. The Tripartite meeting and report will be covered by the operating expenses of the UNDP CO.

3. These will be co-financed by UNDP.

4. The survey at the end of the project will be financed by UNDP (US\$ 3,000).

5. US\$ 59,750 is to be financed by GEF and US\$ 30,000 by UNDP.

V. 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

Strategic Results Framework

A. Logical Framework Matrix

Project Strategy	Objectively verifiable indicators			Sources of verification	Assumptions
	Indicators	Baseline values	Target values and dates		
Long-term goal: To prevent and arrest land degradation by institutionalizing sustainable land management practices					
<p>Project objective:</p> <p>To integrate sustainable land management within decision-making and development planning and strengthen capacities to implement best practices for sustainable land management</p>	<p>Impact Indicators:</p> <ul style="list-style-type: none"> ▪ National policy framework governing land management is guided by an overall policy on sustainable land management ▪ Government budgetary allocations for SLM increased and decreased for unsustainable land management programmes and projects ▪ Best practices for sustainable land management are implemented within the framework of an overall SLM policy ▪ Broad acceptance and increased use of best practices for SLM 	<ul style="list-style-type: none"> ▪ Increased rate of land degradation due to insufficient dissemination of SLM best practices ▪ Land management programmes are unsustainable beyond foreign donor investments ▪ Fragmented and overlapping policy and institutional framework to undertake SLM ▪ Weak institutional leadership and capacity to implement, coordinate, and enforce existing land management programmes ▪ Technical knowledge and capacities to identify and implement best practices for SLM ▪ Marginal awareness of SLM requirements at all levels ▪ Insufficient economic incentives and associated instruments 	<p>By the end of the project:</p> <ul style="list-style-type: none"> ▪ An overall policy for sustainable land management developed and endorsed by a consensus of stakeholders ▪ Significant increase [>10%] in investments in SLM practices over baseline funding at Year 0 ▪ Policy dialogue meeting of all key stakeholders endorses overall SLM policy document, MTIP ▪ Training provided to at least 80 government and non-governmental professionals responsible for and who have a stake in the implementation of SLM 	<ul style="list-style-type: none"> ▪ Overall SLM policy document circulated broadly for review ▪ Independent survey on impacts of improved SLM policy framework and MTIP ▪ Project Steering Committee meeting minutes ▪ GoJ Agency and Cabinet decisions and meeting minutes ▪ UNDP Quarterly reports, APRs, PIRs, TPR and Project Terminal Report ▪ Independent evaluation reports ▪ Newspaper articles on advances and contraventions to SLM policy implementation ▪ Surveys of public awareness and satisfaction of SLM technical support in years 1 and 2 	<ul style="list-style-type: none"> ▪ Project maintains strong political support ▪ Experts and decision-makers will agree on policy gaps and weaknesses to SLM to be filled and strengthened respectively ▪ GoJ and UNDP-GEF continue to support the project strategy, in particular the process to improve the institutionalization of SLM within key agencies ▪ Sustainability of project benefits is assured by GoJ budgetary appropriations and not by extra-budgetary resources from international donors to implement MTIP ▪ Relevant individuals within key government agencies actively participate ▪ Recommendations for replicating and extending the best practices from the demonstration projects are politically, technically and financially feasible

Project Strategy	Objectively verifiable indicators			Sources of verification	Assumptions
	Indicators	Baseline values	Target values and dates		
<p>Outcome 1:</p> <p>Sustainable land management is mainstreamed into national institutions, policies, strategies, and plans</p>	<ul style="list-style-type: none"> ▪ Political will and public opinion drive the SLM mainstreaming process ▪ Government budgetary allocations for SLM increased and decreased for unsustainable land management programmes and projects 	<ul style="list-style-type: none"> ▪ Fragmented and overlapping policy and institutional framework to undertake SLM ▪ Weak institutional leadership and capacity to implement, coordinate, and enforce existing land management programmes ▪ Insufficient economic incentives and associated instruments ▪ Land management programmes are unsustainable beyond foreign donor investments 	<p>By the end of the project:</p> <ul style="list-style-type: none"> ▪ An overall policy for sustainable land management developed and endorsed by a consensus of stakeholders ▪ Significant increase [>10%] in investments in SLM practices over baseline funding at Year 0 	<p><u>For both indicators</u></p> <ul style="list-style-type: none"> ▪ Independent survey on impacts of improved SLM policy framework and MTIP ▪ GoJ Agency and Cabinet decisions and meeting minutes ▪ Independent evaluation reports ▪ Newspaper articles on advances and contraventions to SLM policy implementation 	<ul style="list-style-type: none"> ▪ Project maintains strong political support ▪ Experts and decision-makers will agree on policy gaps and weaknesses to SLM to be filled and strengthened respectively ▪ GoJ and UNDP-GEF continue to support the project strategy, in particular the process to improve the institutionalization of SLM within key agencies
<p>Outputs:</p> <p>1.1: Policy and regulatory frameworks assessed to identify gaps, weaknesses and barriers to coherent and effective SLM</p>	<ul style="list-style-type: none"> ▪ Key stakeholder organizations and civil society groups actively participate in decision-making processes surrounding SLM ▪ Assessment Report 	<ul style="list-style-type: none"> ▪ Various policies relate to land management, notably the NLP, SRDP and ADS, but have gaps and overlap 	<ul style="list-style-type: none"> ▪ By the end of six months, policy and regulatory framework analyzed and report submitted to Cabinet 	<ul style="list-style-type: none"> ▪ Policy and PSC meeting minutes ▪ Policy Dialogue and Workshop reports 	<ul style="list-style-type: none"> ▪ Political commitment to SLM does not wane ▪ No dramatic changes in the economy ▪ Commitment of the GoJ ministries and agencies to fully engage in policy dialogue and consultations at Heads of Ministries and Agencies level ▪ SLM can be implemented in an integrated manner

Project Strategy	Objectively verifiable indicators			Sources of verification	Assumptions
	Indicators	Baseline values	Target values and dates		
1.2: Institutional capacities of SLM stakeholder agencies and organizations assessed and capacity building needs identified	<ul style="list-style-type: none"> ▪ Key stakeholder organizations and civil society groups actively participate in decision-making processes surrounding SLM ▪ Assessment Report 	<ul style="list-style-type: none"> ▪ Multiple government agencies are mandated to address land degradation, but they do not coordinate their work , resulting in unsustainable use of land 	<ul style="list-style-type: none"> ▪ By the end of six months, assessment of institutional capacities for SLM performed and submitted to Cabinet 	<ul style="list-style-type: none"> ▪ Policy and PSC meeting minutes ▪ Policy Dialogue and Workshop reports 	<p>through a framework SLM policy.</p> <ul style="list-style-type: none"> ▪ Political commitment to SLM does not wane ▪ Commitment of the GoJ ministries and agencies to fully engage in policy dialogue and consultations at the Heads of Ministries and Agencies level
1.3: Framework policy for sustainable land management developed	<ul style="list-style-type: none"> ▪ Framework SLM policy and NAP, integrated with all relevant land management policies and programmes ▪ MTSEPF includes priority actions for SLM as defined in the CCD NAP 	<ul style="list-style-type: none"> ▪ Various policies relate to land management, notably the NLP, SRDP and ADS, but have gaps and overlap 	<ul style="list-style-type: none"> ▪ By the end of nine months, a consensus among decision-makers and experts on a framework policy for the integrated implementation of SLM. Report submitted to Cabinet 	<ul style="list-style-type: none"> ▪ Letters of commitments from Head of Ministries and Agencies ▪ Cabinet Decisions and Ministry Papers 	<ul style="list-style-type: none"> ▪ SLM can be implemented in an integrated manner through a framework SLM policy. ▪ Political commitment to SLM does not wane ▪ Commitment of the GoJ ministries and their respective agencies to fully engage in policy dialogue and consultations at the Heads of Ministries and Agencies level
1.4: Strengthened institutional mandates, roles and responsibilities for combating land degradation negotiated	<ul style="list-style-type: none"> ▪ Significant agreement (>90%) among public on the need for SLM ▪ Significant agreement on the recommendations for institutional reform for SLM (>90%) ▪ Revised mandates approved endorsed by 	<ul style="list-style-type: none"> ▪ Multiple government agencies are mandated to address land degradation, but they do not coordinate their work , resulting in unsustainable use of land 	<ul style="list-style-type: none"> ▪ By the end of year 1, agreement on the institutional reforms for integrated SLM framework policy. ▪ By the end of nine months, consensus on the priority SLM interventions of the CCD NAP and project concepts drafted 	<ul style="list-style-type: none"> ▪ Letters of commitments from Head of Ministries and Agencies ▪ Cabinet Decisions and Ministry Papers ▪ Industry press releases (e.g., JBI) 	<ul style="list-style-type: none"> ▪ SLM can be implemented in an integrated manner through a framework SLM policy. ▪ Political commitment to SLM does not wane ▪ Commitment of the GoJ ministries and their respective agencies to fully

Project Strategy	Objectively verifiable indicators			Sources of verification	Assumptions
	Indicators	Baseline values	Target values and dates		
1.5: MTIP to catalyze CCD NAP and SLM implementation developed	<p>Ministries and approved by Cabinet</p> <ul style="list-style-type: none"> MTIP details SLM programmes and projects, with budget estimates and expressions of financial commitments 	<ul style="list-style-type: none"> GoJ JA\$ 97 million allocated to promote the efficient and rational management of land resources LAMP established to implement critical aspects of the NLP, namely public land management, a land registration component, and land information management ELP is to provide lands to the poor in accordance with the NSS and national land and industrial policies, but lacks funding 	<ul style="list-style-type: none"> By the end of year 1, MTIP finalized, submitted, and approved by Cabinet By the end of year 3, 80% of financing requirements for the MTIP secured. 	<ul style="list-style-type: none"> Letters of commitments from Head of Ministries and Agencies Cabinet Decisions and Ministry Papers MTIP report produced and endorsed by Agencies, Ministries, and Cabinet M&E reports (e.g., UNDP quarterly reports, APRs, TPRs, and PIRs, independent final evaluation) 	<p>engage in policy dialogue and consultations at the senior level (Heads of Ministries and Agencies)</p> <ul style="list-style-type: none"> Political commitment to SLM does not wane No dramatic changes in the economy Commitment of the GoJ ministries and their respective agencies to fully engage in policy dialogue and consultations at the senior level (Heads of Ministries and Agencies)

<p>Outcome 2:</p> <p>Capacity for the management, application and adaptation of SLM is developed and enhanced</p>	<ul style="list-style-type: none"> ▪ Broad acceptance and increased use of best practices for SLM ▪ Best practices for sustainable land management are implemented within the framework of an overall SLM policy 	<ul style="list-style-type: none"> ▪ Increased rate of land degradation due to insufficient dissemination of SLM best practices ▪ Marginal awareness of SLM requirements at all levels ▪ Weak institutional leadership and capacity to implement, coordinate, and enforce existing land management programmes ▪ Technical knowledge and capacities in Jamaica are lacking on identifying and implementing best practices for sustainable land management 	<p>By the end of the project:</p> <ul style="list-style-type: none"> ▪ Policy dialogue meeting of all key stakeholders endorses overall SLM policy document, MTIP ▪ Training provided to at least 80 government and non-governmental professionals responsible for and who have a stake in the implementation of SLM 	<ul style="list-style-type: none"> ▪ Survey on the level of public awareness of SLM in years 1 and 2 ▪ Survey on the level of satisfaction of technical support to land users on SLM in years 1 and 2 ▪ M&E reports (e.g., UNDP quarterly reports, APRs, TPRs, and PIRs, independent final evaluation) 	<ul style="list-style-type: none"> ▪ Stakeholders remain committed to the principles and practices espoused by SLM ▪ Recommendations for replicating and extending the best practices from the demonstration projects are politically, technically and financially feasible ▪ Improved practices for sustainable land management will result in increased agricultural yields, and by extension, increased economic returns for small and rural farmers
<p>Outputs:</p> <p>2.1: Identification of training and sensitization needs in SLM skills</p> <p>2.2: Training programme and associated material on best practices for sustainable land management developed</p>	<ul style="list-style-type: none"> ▪ SLM training and sensitization skills identified and agreed upon by consensus of stakeholders (>90%) ▪ Training programme and associated SLM material produced ▪ Guidelines on best practices for SLM are an integral tool of PIOJ's 	<ul style="list-style-type: none"> ▪ A number of land management projects are being implemented, but they do not provide adequate coverage of SLM skills. ▪ A number of land management projects are being implemented, but they do not provide adequate coverage of SLM skills. 	<ul style="list-style-type: none"> ▪ By the end of nine months, SLM training and sensitization needs approved by a large consensus of govt and non-govt stakeholders (>90%, n>250) and PSC ▪ By the end of nine months, SLM training programme and material approved by a large consensus of govt and non-govt stakeholders (>90%, n>250) and PSC 	<ul style="list-style-type: none"> ▪ M&E reports (e.g., UNDP quarterly reports, APRs, TPRs, and PIRs) ▪ Training programme and associated material produced 	<ul style="list-style-type: none"> ▪ Stakeholders actively participate in training workshops ▪ Stakeholders remain committed to the principles and practices espoused by SLM ▪ Donors remain committed to their associated financing of related SLM programmes and projects ▪ GoJ, donors and partners maintain support of

<p>2.3: SLM training and public awareness implemented through policy dialogues and training workshops</p>	<p>economic development planning</p> <ul style="list-style-type: none"> ▪ Annual reports on lessons learned produced and widely disseminated ▪ Active participation in policy dialogues and training workshops by senior agency decision-makers and key stakeholders 	<ul style="list-style-type: none"> ▪ A number of land management projects are being implemented, but they do not provide adequate coverage of SLM skills. 	<ul style="list-style-type: none"> ▪ By the end of year 1, six SLM trainers trained ▪ By the end of the project, six training workshops, 3 public awareness/ lessons learned presentations, and one wrap-up SLM best practice workshop conducted (n>25 each workshop) 	<ul style="list-style-type: none"> ▪ Survey measuring the level of public awareness of SLM (n>250) ▪ Survey measuring the level of satisfaction with SLM technical support (n>250) ▪ Newspaper articles ▪ M&E reports (e.g., UNDP quarterly reports, APRs, TPRs, and PIRs) 	<p>training programme</p> <ul style="list-style-type: none"> ▪ GoJ, donors and partners remain committed to implementing the training programme ▪ Stakeholders remain committed to the principles and practices espoused by SLM ▪ Trained trainers remain committed to the project ▪ Stakeholders actively participate in training workshops
<p>2.4: Five (5) demonstration projects designed and implemented</p>	<ul style="list-style-type: none"> ▪ Five demonstration projects developed and approved by a consensus of stakeholders (>90%) ▪ Effective coordination of land use policy interventions among stakeholder agencies ▪ Survey of stakeholders at project conclusion strongly agree that land management is significant improved and sustainable 	<ul style="list-style-type: none"> ▪ NIDP involves the rehabilitation of irrigation works to increase high value agriculture and farmers' income, but little progress has been made ▪ FD activities and projects include forest and watershed management, but are heavily subsidized with external funding ▪ There is support for large-scale irrigation pilot projects, but little support for small-scale irrigation projects ▪ FAO-supported food 	<ul style="list-style-type: none"> ▪ By the end of the project, at least six project proposals signed by Parish Leader, Ministry Head and MoFP to replicate demonstration projects in other sites through MTIP 	<ul style="list-style-type: none"> ▪ Survey measuring the level of satisfaction with SLM technical support (n>250) ▪ Policy and PSC meeting minutes ▪ Independent final evaluation ▪ Industry press releases (e.g., JAS, PCJ) ▪ M&E reports (e.g., UNDP quarterly reports, APRs, TPRs, and PIRs) 	<ul style="list-style-type: none"> ▪ Donors remain committed to their associated financing of related (baseline) SLM programmes and projects ▪ Political and economic realities do not preclude GoJ commitment to finance NAP and MTIP implementation ▪ Political will of government agencies to share data and information ▪ Stakeholders remain committed to the principles and practices espoused by SLM

		<p>security project designed to help 69 farmers use improved water management techniques</p> <ul style="list-style-type: none">▪ REACT sets out to develop environmentally sound rural enterprises▪ A US\$16 million Forest Conservation Fund Group set up to support forest management▪ A number of small-scale SLM interventions at the community level, but lessons learned and best practices have not been widely disseminated			
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B. Provisional Work Plan

Responsible Agent	Activity	Quarter											
		1	2	3	4	5	6	7	8	9	10	11	12
Outcome 1: Sustainable Land Management mainstreamed into national policies, plans and institutions													
1.1 Policy and regulatory framework reviewed to identify gaps, weaknesses and barriers to coherent and effective SLM													
LLDE	1.1.1 Review of policy documentation	X											
LLDE	1.1.2 Consultations with policy-makers and senior agency directors	X	X										
LLDE	1.1.3 Draft report	X	X										
Venue	1.1.4 Policy dialogue to discuss findings		X										
LLDE	1.1.5 Finalize report and submit to PSC for approval		X										
1.2 Institutional capacities of SLM stakeholder agencies and organizations assessed and capacity building needs identified													
LMC	1.2.1 Institutional assessment of organizational performance for SLM	X											
LMC	1.2.2 Consultations with institutional representatives and civil society stakeholders	X	X										
LMC	1.2.3 Draft report	X	X										
Venue	1.2.4 Workshop to discuss findings		X										
LMC	1.2.5 Finalize report and submit to PSC for approval		X										
1.3 Framework policy for SLM developed													
LLDE, LMC	1.3.1 Building on outputs 1.1 & 1.2, draft framework policy document that integrates and maps implementation of SLM: circulate for public comment		X	X									
LLDE, LMC	1.3.2 Consultations with all key stakeholders and/or their representatives		X	X									
Venue	1.3.3 Stakeholder workshop			X									
LLDE, LMC	1.3.4 Finalize policy document			X									
LLDE, LMC	1.3.5 Submit and secure Cabinet Decision			X	X								
1.4 Strengthened institutional mandates, roles and responsibilities negotiated and Ministry Papers prepared													
LLDE, LMC	1.4.1 Policy negotiations to revise institutional mandates; new ToRs for institutional structures drafted	X	X	X									
LLDE, LMC	1.4.2 On the basis of Cabinet Decision 1.3.5, workshop to finalize ToRs and facilitate transition to mandates, roles and responsibilities			X									
LLDE, LMC	1.4.3 ToRs for institutional structures finalized and approved by stakeholder agencies and organizations				X								
LLDE, LMC	1.4.4 Ministry Papers (on Cabinet Decision of 1.3.5) prepared and approved to institutionalize revised mandates				X	X							
Venue	1.4.5 Agencies implement new institutional arrangements (consultations)					X	X	X	X	X	X	X	X
Venue	1.4.6 Final stakeholder workshop to reinforce institutionalization of SLM												X

Responsible Agent	Activity	Quarter											
		1	2	3	4	5	6	7	8	9	10	11	12
1.5 MTIP developed to catalyze development of CCD NAP and SLM													
LLDE, PIOJ	1.5.1 Policy and stakeholder consultations to prioritize NAP implementation	X	X	X									
LLDE, LMC	1.5.2 CCD NAP SLM priority project concepts drafted			X									
PIOJ	1.5.3 MTIP drafted to include priority SLM project concepts and their strategic financing and implementation			X	X								
Venue	1.5.4 Stakeholder workshop to finalize project concepts				X								
PIOJ	1.5.5 Policy and stakeholder consultations to finalize donor investments for CCD NAP implementation				X								
PIOJ	1.5.6 MTIP finalized and submitted to Cabinet (Cabinet Decision secured)				X								
Outcome 2: Capacities for Sustainable Land Management developed and best practices demonstrated													
2.1 Identification of training and sensitization needs in SLM skills.													
LMC	2.1.1 Building on output 1.2, assessment and analysis of SLM training and sensitization needs		X	X									
Venue	2.1.2 Stakeholder workshop to finalize SLM training and sensitization needs			X									
2.2 Training programme and associated material on best practices for sustainable land management developed													
LMC	2.2.1 Building on output 2.1, develop a comprehensive training programme			X									
Venue	2.2.2 Stakeholder consultations and workshop to finalize training programme			X									
LMC	2.2.3 Develop and publish training and public awareness material				X								
2.3 SLM training implemented through policy dialogues and training workshops													
LMC	2.3.1 Train SLM trainers				X								
Venue	2.3.2 Conduct training workshops (1/demo project) and public awareness presentations (1/year in conjunction with activity 3.1.5)				X	X	X	X	X	X	X	X	X
JCDT	2.3.3 JCDT carries out its public education campaign on natural resource mgmt	X	X	X	X	X	X	X	X	X	X	X	X
JCDT	2.3.4 JCDT's community projects and training in wildlife conservation and land management	X	X	X	X	X	X	X	X	X	X	X	X
JCDT	2.3.5 Community sustainable livelihoods training	X	X	X	X	X	X	X	X	X	X	X	X
JCDT	2.3.6 Research on natural resource management	X	X	X	X	X	X	X	X	X	X	X	X

Responsible Agent	Activity	Quarter											
		1	2	3	4	5	6	7	8	9	10	11	12
2.4 Five (5) demonstration projects designed and implemented													
LMC	2.4.1 Demonstration project development		X	X									
LMC	2.4.2 Stakeholder workshops: Demonstration project proposals finalized			X									
LLDE	2.4.3 Demo. project proposals endorsed and approved by GoJ and UNDP/GEF				X								
Sub-Cont.	2.4.4a Demonstration project: Small-scale irrigation system					X	X	X	X	X	X	X	X
Sub-Cont.	2.4.4b Demonstration project: Quarry re-vegetation					X	X	X	X	X	X	X	X
Sub-Cont.	2.4.4c Demonstration project: Bauxite mine rehabilitation					X	X	X	X	X	X	X	X
Sub-Cont.	2.4.4d Demonstration project: Agro-forestry					X	X	X	X	X	X	X	X
Sub-Cont.	2.4.4e Demonstration project: SLM best practices on leased lands					X	X	X	X	X	X	X	X
JCDT	2.4.5 Reforestation and forest rehabilitation in the BMJCNP	X	X	X	X	X	X	X	X	X	X	X	X
Monitoring, Evaluation, and Lessons Learned (Adaptive Collaborative Management)													
3.1 Monitoring and evaluation plan developed and implemented, including lessons learned													
LLDE	3.1.1 Develop detailed monitoring and evaluation plan (includes detailed ToRs for the preparation of lessons learned material and dissemination plan)	X											
LLDE	3.1.2 Using M&E reports and stakeholder consultations, prepare and disseminate annual report on lessons learned				X				X				X
LMC	3.1.3 Independent evaluation of demonstration project proposals			X									
LMC	3.1.4 Independent evaluation and approval of training programme				X								
LMC	3.1.5 Participatory evaluation of demo projects (5 workshops, years 2 & 3)								X				X
ILME 1	3.1.6 Conduct independent mid-term evaluation								X				
ILME 2	3.1.7 Conduct independent final evaluation											X	
UNDP	3.1.8 Regional Workshop on Sustainable Land Management: Lessons Learned												X
NRS	3.1.9 Conduct survey on public awareness of SLM			X					X				
NRS	3.1.10 Conduct survey on land users' satisfaction with SLM training and support			X					X				
NRS	3.1.11 Conduct end-of-project survey of N>500 stakeholders on project impact												X
Project Management													
4.1 Project management structures created													
LLDE	4.1.1 Establish Project Steering Committee (PSC)	X											
FD, LLDE	4.1.2 Set up Project Management Unit	X											
LLDE, PSC	4.1.3 Develop, finalize, and approve provisional work plan	X											
LLDE	4.1.4 Quarterly meetings of the Project Steering Committee	X	X	X	X	X	X	X	X	X	X	X	X
LLDE	4.1.5 Implement M&E plan (quarterly progress reports, TPRs, etc)	X	X	X	X	X	X	X	X	X	X	X	X

C. Total Budget and Work Plan

Award ID:		00039305								
Award Title:		PIMS 3468: Jamaica – Capacity Building for Sustainable Land Management								
Business Unit:		JAM10								
Project ID:		00044037								
Project Title:		PIMS 3468: Jamaica – Capacity Building for Sustainable Land Management								
Implementing Partner (Executing Agency)		Forestry Department, Ministry of Land and Environment								
GEF Outcome/Atlas Activity	Executing Agency	Fund ID	Donor	Atlas Code	ATLAS Budget Description	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Total (US\$)	Budget Note
OUTCOME 1: Sustainable Land Management is mainstreamed into national policies, plans and institutions	Forestry Department, MAL	62000	GEF	71300	Local Consultants	57,000	14,250	10,500	81,750	1,2,3
				72100	Contractual Services Company	7,500	7,500	9,500	24,500	
					Sub-total GEF	64,500	21,750	20,000	106,250	
					Total Outcome 1	64,500	21,750	20,000	106,250	
OUTCOME 2: Capacities for Sustainable Land Management developed and best practices demonstrated	Forestry Department, MAL	6200	GEF	71300	Local Consultants	30,000	26,250	27,750	84,000	4,5
				74200	Printing: SLM training and awareness material	5,000	2,500	2,500	10,000	
				72100	Contractual Services Company	20,000	80,000	80,000	180,000	
					Sub-total GEF	55,000	108,750	110,250	274,000	
					Total Outcome 2	55,000	108,750	110,250	274,000	

GEF Outcome/Atlas Activity	Executing Agency	Fund ID	Donor	Atlas Code	ATLAS Budget Description	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Total (US\$)	Budget Note
OUTCOME 3: Monitoring, Evaluation, Lessons Learned, and Adaptive Project Management	Forestry Department, MAL	62000	GEF	71200	International Consultants	0	11000	16000	27000	6,7
				71300	Local Consultants	4,950	9,900	9,900	24,750	8,9
				71600	Travel	0	4,000	4,000	8,000	10
					Sub-total GEF	4,950	24,900	29,900	59,750	
		4000	UNDP	71200	International Consultants	8,000	0	0	8,000	11,12
				71300	Local Consultants	0	0	3,000	3,000	14
				71600	Travel	4,000	0	0	4,000	15
				72100	Contractual Services Company	0	0	12,000	12,000	
				74100	Audit	1,000	1,000	1,000	3,000	
			Sub-total UNDP	13,000	1,000	16,000	30,000			
				Total Outcome 3	17,950	25,900	45,900	89,750		
Adaptive Project Management	Forestry Department, MAL	62000	GEF	71300	Local Consultants	2,100	4,200	4,200	10,500	8,9
				72100	Contractual Services Company	4,000	8,000	8,000	20,000	
				72500	Office Supplies	900	1,800	1,800	4,500	
					Sub-total GEF	7,000	14,000	14,000	35,000	
		4000	UNDP	71300	Local Consultants	1,500	2,250	3,750	7,500	13
				71600	Travel	500	2,000	2,000	4,500	16
				72100	Contractual Services Company	1,000	1,000	1,000	3,000	
			Sub-total UNDP	3,000	5,250	6,750	15,000			
				Total Management	10,000	19,250	20,750	50,000		
GRAND TOTAL						147,450	175,650	196,900	520,000	

Summary of Funds	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Total (US\$)
Total GEF :	131,450	169,400	174,150	475,000
Total UNDP :	16,000	6,250	22,750	45,000
Total GoJ/PIOJ (in-kind)	50,000	0	0	50,000
Total GoJ/FD (in-kind)	25,000	25,000	25,000	75,000
Total JCDDT	106,000	106,000	104,000	316,000
Total Project	328,450	306,650	325,900	961,000
Percentage allocated per year	34	32	34	100

Budget Notes:

1. Policy and stakeholder consultations, workshop facilitation, and report writing; 55 weeks
2. Policy and stakeholder consultations, workshop facilitation, and report writing; 38 weeks
3. Policy and stakeholder consultations, workshop facilitation, and report writing; 16 weeks
4. Policy and stakeholder consultations, workshop facilitation, and report writing; 56 weeks
5. Policy and stakeholder consultations, workshop facilitation, and report writing; 56 weeks
6. US\$ 11,000 fee and US\$ 4,000 travel/DSA (see budget note 9); 4 weeks
7. US\$ 16,000 fee and US\$ 4,000 travel/DSA (see budget note 9); 6 weeks
8. Project management activities, e.g., policy and stakeholder consultations for APR/PIR and TPR; 39 weeks
9. US\$ 3,000 fee each of the two required GEF SLM surveys; 3 weeks per survey
10. Travel and DSA for both international consultants (see budget notes 6 and 7)
11. US\$ 4,000 fee and US\$ 2,000 travel/DSA (see budget note 15); national or Caribbean consultant; 4 weeks
12. US\$ 4,000 fee and US\$ 2,000 travel/DSA (see budget note 15); national or Caribbean consultant; 4 weeks
13. Policy and stakeholder consultations, workshop facilitation, and report writing to assist LLDE; 10 weeks
14. US\$ 3,000 fee for the final impact assessment survey; national or Caribbean consultant; 3 weeks
15. Travel and DSA for both consultants evaluating the SLM training programme and demonstration project concepts
16. Travel to and from demonstration project sites.

Annexes

Annex 1: GEF Operational Focal Point Endorsement Letter



Telephone: (876) 960-5A32-3
Facsimile: (876) 920-7267
Email: email: info@ej.gov.jm

MINISTRY OF LOCAL GOVERNMENT AND ENVIRONMENT
16A HALF-WAY-TREE ROAD
KINGSTON 5
JAMAICA

ANY REPLY OR SUBSEQUENT REFERENCE TO THIS COMMUNICATION SHOULD BE ADDRESSED TO THE PERMANENT SECRETARY AND THE FOLLOWING REFERENCE QUOTED:

Ref: _____

Post-it® Fax Note	7671	Date	20/7/07	# of pages	1
To	Arturo Hein	From	L Barnaby		
Co./Dept.	UNDP	Co.			
Phone #		Phone #			
Fax #	946-2163	Fax #	920-7267		

July 20, 2007

Mr. Arturo Hein
Resident Representative O.I.C.
United Nations Development Programme
1-3 Lady Musgrave Road
Kingston 5

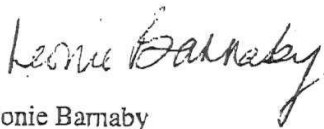
Dear Mr. Hein

GEF Project Capacity Building for Sustainable Land Management in Jamaica

As the GEF operational focal point, I hereby endorse the proposal for a medium-size project to build capacity for sustainable land management, rural development and drought management in Jamaica. The project **“Capacity Building for Sustainable Land Management in Jamaica”** was developed in consultation with the focal points, government agencies and other relevant stakeholders.

We look forward to the commencement of the project and achievement of its objectives.

Yours sincerely


Leonie Barnaby
for Permanent Secretary

REF.	X REF.
UNDP	JUL 21 0 RECD JA.
ACTION	INFO.

Annex 2: Letters of co-financier commitments



www.forestry.gov.jm

Please reply to Conservator of Forests

Forestry Department

Ref. No. PJ 1/83

June 18, 2007

Mr. Arturo Hein
Resident Representative
United Nations Development Programme
1 Lady Musgrave Road
Kingston 5

Dear Mr. Hein

Re: Letter of Commitment of Co-financing for GEF SLM Mainstreaming Project

The Forestry Department of the Ministry of Agriculture and Lands confirms its commitment of **US\$75,000** to the implementation of the UNDP-GEF project "Capacity Building for Sustainable Land Management in Jamaica".

This Department will contribute secretariat and administrative support for the Project throughout its three (3) year term.

Yours sincerely

Marilyn Headley (Miss)
Conservator of Forests



173 Constant Spring Road, Kingston 8, Jamaica (West Indies)
Telephone (876) 924 2667/2668 Facsimile (876) 924 2626
email: forestrydepartment@forestry.gov.jm



Office of
The Resident Representative
1-3 Lady Musgrave Road, Kingston 5, Jamaica

September 12, 2007

Dear Mr Glemarec

**Re: Letter of Commitment of Co-financing for Global Environment Facility
Sustainable Land Management Mainstreaming Project**

The United Nations Development Programme hereby confirms its commitment of US\$ 45,000 to the implementation of the UNDP-GEF project "Capacity Building for Sustainable Land Management in Jamaica". The funds will support several consultancies under the outcome for monitoring and evaluation. This will be in the form of an in cash contribution through to be administered through the project.

We look forward to the successful implementation of this valuable project.

Sincerely,

A handwritten signature in black ink, appearing to read 'Hein', written over a horizontal line.

Arturo Hein
Resident Representative, OIC

Yannick Glemarec,
Executive Director,
UNDP-GEF



JAMAICA CONSERVATION & DEVELOPMENT TRUST

29 Dumbarton Avenue, Kingston 10, Jamaica, W.I.

P.O. Box 1225, Kingston 8, Jamaica, W.I.

Tel: (876) 920-8278-9, 960-2848-9 Fax: (876) 960-2850

Email: jcdt@cybervale.com Website: www.greenjamaica.org.jm



Blue & John Crow
Mountains National
Park



JCDT is a member
of the World
Conservation Union
(WCU), the
Caribbean
Conservation
Association (CCA),
and the National
Environmental
Societies Trust
(NEST).

28th June, 2007

Mr. Arturo Hein
Resident Representative
United Nations Development Programme
1 Lady Musgrave Road
Kingston 10

Dear Mr. Hein:

RE: Letter of Commitment of Co-financing for Global Environment Facility - Sustainable Land Management Mainstreaming Project

The Jamaica Conservation and Development Trust (JCDT) hereby confirms our commitment of US\$316,000 to the implementation of the UNDP-GEF project "Capacity Building for Sustainable Land Management in Jamaica" between 2007 – 2010. Of these funds, we already have over one-third in place and we anticipate signing agreements for the remainder from a variety of non-GEF sources over the next two months. These funds will be spent through projects directly executed by JCDT within the area of sustainable land management, mainly in the Blue and John Crow Mountains region. More specifically, it will be implemented through the following activities:-

- Reforestation and forest rehabilitation
- Community sustainable livelihoods training
- Community projects
- Public education
- Research and other projects

Yours sincerely,

Susan Otuokon
Executive Director

REF. PAG 301/00F	
X REF.	
UNDP JUL 0 2 RECD 'A	
ACTION	INFO. A.H.

Robert Stephens, Chairman; Carolyn Hayle, Deputy Chairman; Michael Waller, Treasurer; Hugh Hyman, Secretary; Jehn Nottage; Francis Peltz; Dr. Park Ulew - Agoo; Dr. Margaret Jones Williams; Myrna McLanahan; Camille Neesham; Lt. Col. Michael Rodriguez; Robert Taylor; Alfred Heron; Michael White

*A Better Environment = A Better Life
Do The Right Thing!*

Annex 3: NCSA Thematic Assessment of Land Degradation

The purpose of the Land Degradation Thematic Assessment was to analyze the nation's capacity needs, priorities and constraints with respect to Jamaica's efforts to meet its global environmental objectives with particular reference to the obligations of the **United Nations Convention to Combat Desertification (CCD)**.

The National Capacity Self-Assessment was conducted at three levels:

- Individual
- Institutional
- Systemic

The Thematic assessment was conducted within the context of the commonly accepted definition of capacity building as the actions needed to enhance the ability of individuals, institutions and systems to make and implement decisions and perform functions in an effective, efficient and sustainable manner.

The **United Nations Convention to Combat Desertification (CCD)** was adopted in Paris on **June 17 1994** and was entered into force on **December 26, 1996** ninety days after the fiftieth ratification was received. Jamaica became a Party of the **CCD** on **March 10 1998** after its accession on **November 22 1997**. It is the only internationally recognized legally binding instrument that addresses the problem of land degradation in dryland rural areas. The **CCD** places human beings at the center of its effort to combat desertification and mitigate the effects of drought.

In May 2003 the council of the Global Environment Fund (GEF) introduced Operational Programme n.15 (OP15) as a specific framework for intervention on Sustainable Land Management (SLM). The main objective of OP15 is *“to mitigate the causes and negative impacts of land degradation on the structure and functional integrity of ecosystems through sustainable land management practices as a contribution to improving people's livelihoods and economic well-being.”*

The Ministry of Local Government and Environment (MLGE) is now the Focal Point Ministry with the transfer of both the subject and the National Focal Point (NFP) from the Ministry of Water and Housing (MHTWW) in 2003. The **CCD** Working Committee, established in 2000, is currently inactive but there is a proposal to reactivate it.

Little progress has been made with respect to Jamaica meeting its obligations as a Party of the **CCD** but at the end of 2004 the Permanent Secretary of the Ministry of Local Government and Environment approved the proposal for the recruitment of a consultant who will work with the NFP to have a draft National Action Programme (NAP) prepared for submission to Cabinet by May 2005.

Capacity Constraints

The major issues and capacity constraints identified are summarized in **Tables 3** and 5 and are as follows:

1. Need for proactive Working Committee or Secretariat with responsibility for the development of the National Action Programme and a Drought Management Policy and Plan.
2. The absence of a clear system of accountability within the system of Government with respect to the country meeting its obligations as a Party of the Convention
3. The low level of public awareness and knowledge about the **CCD** generally but specifically in key Implementing Agencies and Government Ministries
4. The enabling environment, with respect to appropriate policies, laws and programmes, exists for the implementation of the **CCD** and should enhance the development of the NAP and the Drought Management Policy and Plan.

Recommendation

The followings are the recommendations.

Institutional

1. The development of an appropriate system of accountability for the Convention within the system of government. This Unit would be responsible for ensuring that the country not only meets its obligations as a party of the CCD, but benefits fairly from its participation as a Party.
2. The name of a government organization responsible for supporting the Focal Point Institution in driving the implementation of the NAP (once in place).
3. The expeditious and timely dissemination of relevant information, such as reports of COP and other activities associated with the CCD to the key implementation agencies.
4. A comprehensive assessment of the factors that cause drought and the mapping of drought areas as the basis for the expeditious development of and the periodic review of the NAP for the country. This should also facilitate the development of more effective drought monitoring programmes especially in the southern St Elizabeth and Clarendon plains, the areas most vulnerable to drought in Jamaica.
5. The development of methods to measure and collect data related to the water requirements of the different crops, and the water demands at the different stages of crop growth and development.
6. The introduction of and implementation of effective systems for the forecasting of drought and the development of effective early warning and forecasting systems, which will include the development of drought indices.
7. The acquisition of appropriate technology which will allow more effective management and distribution of the country's water resources and adequate financing for existing projects and programmes. This will include the acquisition of equipment to reduce dependence on manual meteorological data collection.
8. Public and private sector investment in water storage systems to increase reliable yield of water.

9. Provision of capital funds to allow the implementation of critical projects and to facilitate needed research whilst at the same time allowing organizations such as the Water Resources Authority and the Meteorological Department to not only attract suitable qualified professional staff but to effectively use their skills and knowledge.
10. Action to be taken to recover lost capacity such as that identified by Sugar Industry Research Institute with respect to underutilized pump sources and abandonment of irrigation infrastructure and systems in some sugar cane producing areas.
11. Provision of funds to partner with GoJ/World Bank to hire a consultant to formulate a comprehensive policy on squatter management, build data base and map related areas to prioritize and target areas that need critical attention.

Public Education

12. The development of an effective and comprehensive public education programme which targets not only the wider public but which will ensure that personnel in key implementing agencies are informed of the country's obligations in the CCD and the role that they are expected to play in meeting these obligations.

Legal, Regulatory and Policy

13. The legislative and regulatory framework for the successful development of the NAP and which allows the country to meet its obligations as a Party of the CCD exists but there is need for enforcement of existing laws and the development of appropriate legislation to prevent the growing conversion of agricultural lands to residential and other commercial uses.
14. The development of effective and comprehensive agricultural and land use policies including crop zoning laws and the restriction of the allocation of crop production incentives to farmers producing crops and recommended for zoned areas.
15. Enforcement and strengthening of laws related to illicit mining of sand and the restoration of mined out bauxite lands, activities which can contribute significantly to land degradation as well as the destruction of aquifers.

Annex 4: NCSA Institutional Assessment

The National Capacity Self-Assessment was conducted at three levels within the context of the commonly accepted definition of capacity building as ‘the actions needed to enhance the ability of individuals, institutions and systems to make and implement decisions and perform functions in an effective, efficient and sustainable manner’. The three levels are further explained below.

- Individual capacity building refers to the process of changing attitudes and behaviours, usually through training activities that disseminate knowledge and develop skills.
- Institutional capacity building aims at the development of the institution as a total system and focuses on the overall performance of the organization, its functional capabilities as well as its ability to adapt to change.
- Systemic capacity building is concerned with the creation of ‘enabling environments’ i.e. the overall policy, economic, regulatory and accountability framework within which the individuals and institutions operate.

This report focused on analyzing the capacity needs and constraints with respect to the institutional and funding concerns across the Rio Conventions. The findings of the report were built on the results from the three thematic assessments²⁰ and are aimed at further evaluating the issues which were identified as priority areas of action in these reports. The priority areas of action identified from the thematic assessments are listed below in no particular order of significance.

1. National Action Programmes (NAPs) developed and implemented as a matter of priority for Climate Change and Land Degradation.
2. Implementation of the National Biodiversity Strategy and Action Plan (NBSAP) as Jamaica response to the Convention on Biodiversity (CBD).
3. Effective administrative mechanisms established to oversee the implementation of NAPs and NBSAP in areas of coordination, reporting, accountability and performance targets.
4. Incorporation of the NAPs and NBSAP into the corporate plans and work programmes of the executing and collaborating organizations.
5. Development of a harmonized policy and legal framework to support the programmes/activities of the Rio Conventions.
6. Implementation of a comprehensive integrated public awareness programme.
7. Effective coordinated fund raising.

²⁰ Final Report **Thematic Assessment** Convention on Biological Diversity, Final Report **Thematic Assessment** United Nations Framework Convention on Climate Change, Final Report **Thematic Assessment** United Nations Convention to Combat Desertification

Of greatest relevance to this report are priority areas 1, 2, 3, 4 and 7 which will be dealt with in this report. Items 5 and 6 are examined in the cross cutting legal and public education reports²¹.

Institutional Issues

An evaluation of the underlying issues related to the emergence of the priority areas of action which were identified in the thematic assessments pointed to the need for a more integrated approach to the management of the programmes developed to support the implementation of the Conventions. The weakness and in some cases absence of effective integration mechanisms among and within implementing organizations were regarded as significant capacity constraints which often resulted in bottlenecks in implementation of programmes and a failure to effectively built on the synergies which exist across the Conventions.

Additionally, within the context of the management of each Convention the effectiveness, role, and influence of ‘the Convention Committee’ was brought into question. The absence of Climate Change and Land Degradation Committees to guide the country’s programmes was identified as another capacity constraint which in the case of the Framework Convention on Climate Change and the Convention to Combat Desertification (Land Degradation) has resulted in inadequate performance as it relates to the development of NAPs. It was the view of the stakeholders and the finding of the thematic assessments that where such Committees were not in place they should be established as clearly such groups could play a major role in the implementation of the Convention.

In the case where a ‘Convention Committee’ existed that is for the Biodiversity Convention, the issues of the degree of influence and authority of the Committee to effectively monitor the implementation of NBSAP and to direct and guide inter agency collaboration and coordination were questionable.

The essential and critical question then with respect to an effective institutional framework was not the absence of or effectiveness of ‘Convention Committees’ (although this has clearly been identified as a capacity issue) but the challenge of making these committees as effective as possible given that their composition which by necessity is multi-sectoral and the operation which by and large is conducted not under any legal mandate or even policy framework but out of a spirit of interagency collaboration. While in essence this is a good thing the issues of the authority, accountability, and performance of the Committees need to be addressed.

In light of this evaluation, the absence of effective mechanisms for coordination of the work to support the implementation of the Conventions was thought to be a significant capacity constraint. At the highest level of decision-making the need for national coordination of the activities undertaken for the three Conventions was identified as a matter of the utmost priority. Institutional coordination is required in order to establish priorities and direct action in areas which are cross cutting and where the lines of authority may be blurred. Correction of this capacity gap was considered as a priority areas of action in order to have more effective and efficient management of the work of the Rio Conventions.

²¹ Jamaica, Policy and Legal Cross Report, September 2005
Jamaica, Cross Cutting Issues of Public Awareness, Education and Training, May 2005

Additionally, the development of strong institutions requires not only that capacity issues be addressed but also that the presence of strong and committed accountable leadership at all levels of the institutional framework. Solutions to those issues perhaps strictly lie outside of an assessment of capacity issues but must be borne in mind as the country strives to improve its performance in this area.

The following issues must be addressed in order to strengthen the institutional capacity:

- establishment of effective mechanisms for coordination of the work across the Rio Conventions, to provide guidance at the highest decision making level on cross cutting technical issues and major funding efforts;
- establishment of functional and effective Convention Committees;
- strengthening of major executing organizations and identification of these organizations for Climate Change and Land Degradation; and
- Strengthening of mechanisms for monitoring and reporting as a strategy to improve accountability.

Funding Issues

The absence of sufficient funding was a recurring finding of all the NCSA reports. The inadequacy of funding was identified as a capacity constraint. By and large this gap is due to a combination of factors which include insufficiency of skills and experience in fundraising as well as the absence of a coordinated approach to seeking funding to support the work across all three Conventions.

It must be noted that although all the issues related to Jamaica's meeting its environmental obligations are not related to the issue of funding, the ability of the country to seriously address the implementation of NBSAP or any NAP which may be developed lies in finding additional funding outside of the current levels of funding provided by the government.

The Global Environment Facility (GEF) is the major source of funding for the conventions and while Jamaica has received some support the country has not placed itself in a position to fully take advantages of the opportunities for funding available through the Facility.

In June 2005 the GEF Council met to discuss and elaborate on initial proposals for programming directions and tools for GEF-4. The GEF Council wants to ensure that it is responsive to the evolving perspectives of the international community with respect to the global environment and sustainable development. The third Overall Performance Study of the GEF has made some policy recommendations for replenishment of the fund which has been endorsed by the Council. These recommendations need to be considered by Jamaica in light of the findings of NCSA which has identified funding as a major capacity constraint.

The following is proposed for the GEF 4 programme:

- (a) Move towards more integrated approaches to the natural resource management challenges that span the global environmental agreements; and

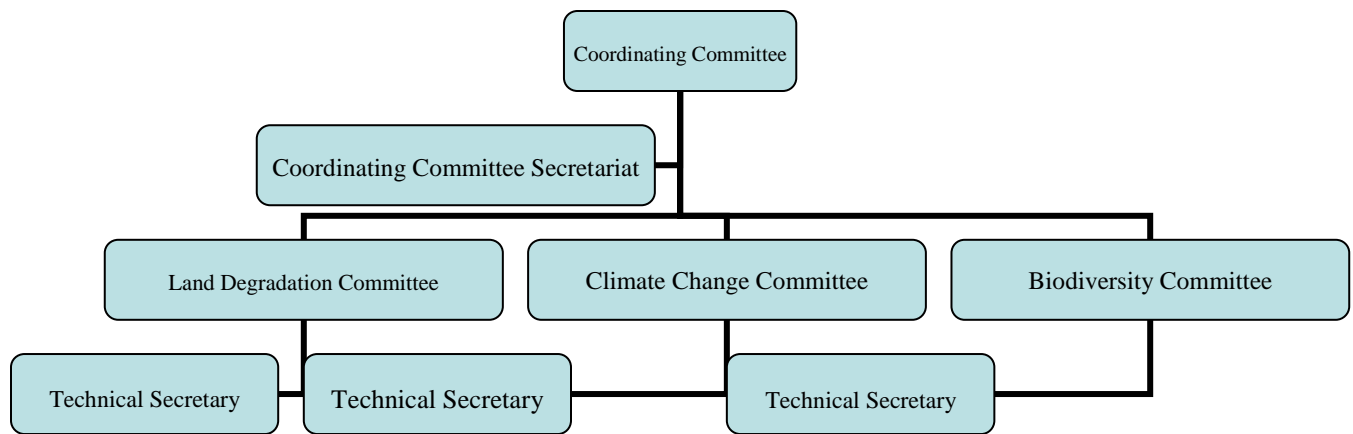
(b) Enhancing the potential for sustainable project outcomes, paying even greater attention to integration of global environmental challenges into natural sustainable development policies and programmes.

Pursuing integration across focal areas will allow the GEF to fulfill its role as catalyst and facilitator of global environmental sustainability and Jamaica must be aware of this policy approach within the GEF and focus its fundraising strategy towards the integration of the cross cutting issues across the Conventions.

Funding beyond the contributions from the GoJ is required to address the implementation of programmes that will support Jamaica’s efforts at meeting its environmental obligations with regard to the Rio Conventions. However, to access funding available through the GEF, non-traditional and bilateral sources, there needs to be an integrated strategically coordinated approach guided by the MLGE. Additionally, The GoJ needs to re-examine its current allocation to the environmental sector. The MLGE however, faces capacity constraints at the level of staffing and expertise and the organization must be strengthened to effectively perform that role.

Recommendations

The major recommendation of this report addresses the need to strengthen the institutional coordination mechanisms which should result in more effective programme implementation in the medium to long-term. Effective coordination mechanisms will result in more effective technical programmes and funding raising efforts both of which will contribute significantly to building stronger institutions which are critical to the country successfully and sustainably addressing its environmental obligations with regard to the Rio Conventions. It is recommended that Jamaica establish a ‘Conventions Coordinating Committee’. The proposed coordination structure is shown in the Figure below and fully described in Chapter 4 of the report.



Proposed Organizational Chart Rio Conventions Coordination

Additionally the following actions are to be undertaken:

- strengthening of the Convention administrative capability within each of the main executing organizations;
- selection of an executing organization for Land Degradation;
- formation of ‘Convention Committees’ for Land Degradation and Climate Change;
- introduction of stronger mechanisms of accountability, reporting and performance parameters for the ‘Convention Committees’; and
- centralization of cross cutting fund raising efforts with direction through the ‘Conventions Coordinating Committee’.

Annex 5: Land Degradation Root Cause Matrix

The content of the matrix summarizes a series of Focus Group Meetings held on 15, 16, 22 and 23 February 2006 at the Ministry of Local Government and Environment. Participants were drawn from the Agricultural, Water, Mineral Extraction, Rural Development, Poverty Alleviation and Human Settlement Sectors.

Problem	Threat	Root Cause	Barriers	Solutions
1. Soil Erosion	<ul style="list-style-type: none"> • Decrease in soil quality and productivity • Increased runoff rate increasing severity of flooding • Decrease in infiltration resulting in reduced spring and dry season stream flow • Sedimentation of rivers, streams, coastline • Loss of soil fertility • Decline in agriculture 	<ul style="list-style-type: none"> • Inappropriate agricultural production on steep slopes • Limited applications of sound cultural practices • Removal of forests • Absence of land tenure for farmers • Inappropriate roads, construction • Natural disasters • Lack of infrastructure (river training) • Maintenance of infrastructure 	<ul style="list-style-type: none"> - Cost of implementing good soil practices - Lack of technical knowledge appropriate soil conservation - Lack of agricultural land or policy(guidelines) - Lack of economic instruments - Lack of comprehensive legislative framework - Lack of enforcement of penalties - Absence of institutional accountability and coordination 	<ol style="list-style-type: none"> 1. Develop effective agricultural policy 2. Provide access to land 3. Train farmers in appropriate cultural techniques 4. Develop mechanism for funding the sector/economic instruments. 5. Strengthen relevant institutions and mechanisms for more effective coordination
2. Low Soil Productivity	<ul style="list-style-type: none"> • Decline in farming incomes • Increase in poverty in agriculture dependent communities • Risk to country's food security • Decline in agricultural sector • Decline in development rural communities 	<ul style="list-style-type: none"> • Lack of appropriate farm roads • Low soil fertility • Over use of land – poor crop rotation • Poor land utilization • Decline in availability of arable acres • Mono-cropping • Loss of top soil • Absence/insufficient water • Over extraction (saline intrusion) • Limited access to irrigation • Improper use/inefficient use of water • Dependence on rainfall • Poor cultural practices 	<ul style="list-style-type: none"> - Limited irrigation infrastructure especially at small-scale - Limited funding of NIC - Unattractiveness in terms of private investment in irrigation - Ineffective policy on irrigation pricing - Inefficiency water delivery (high losses) - Conflict of GoJ Housing Act competition for arable lands - Policy framework ineffective that is lack of policy coherence conflicting policy (land use, housing, agriculture and rural development) - Insufficient enforcement of forest legislation - Lack of coordination among relevant agencies 	<ol style="list-style-type: none"> 1. Develop effective and coherent policy framework for agriculture, land, rural development and water sectors. 2. Train farmers in appropriate cultural practices 3. Introduce low cost/small-scale irrigation systems to improve availability of water 4. Develop early warning system for drought 5. Development economic instruments to improve access to financing 6. Develop institutional capacity for land information systems, land use planning and zoning systems 7. Develop legislation land zoning/utilization

3. Forest degraded	<ul style="list-style-type: none"> • Loss of habitat/ biodiversity • Loss of vegetative cover resulting in soil erosion • Fragmentation of forest • Sedimentation of rivers, streams, and coastline 	<ul style="list-style-type: none"> • Illegal cultivation • Slash and burn agriculture • Illegal fires • Economic benefits of forest resources that is extraction of forest product (timber, yam sticks, charcoal) • Use of land for planting crops • Legal issues for example FIDCO/Coffee land lease arrangement • Unsustainable harvesting practices (harvesting versus planting) • Natural disasters 	<ul style="list-style-type: none"> - Conflicting Policy (land-use i.e., change from forests – coffee etc.) - Inefficient enforcement of existing forest legislation - Insufficient collaboration and coordination among agencies, - Slow pace of judicial system (low priority) - Insufficient regulations governing forests on private lands (Conservation Easement Act) - Insufficient incentive to promote forest conservation - Low levels of awareness of forest importance 	<ol style="list-style-type: none"> 1. Introduce economic incentive to encourage private sector development of forest 2. Develop and promote agro-forestry 3. Develop effective rural development policy 4. Strengthen institution framework and coordination 5. Provide access to land 6. Develop awareness programme at all levels on the importance of forest
4. Insufficient water	<ul style="list-style-type: none"> • Decline in farming incomes • Increase in poverty in agriculture dependent communities • Risk to country's food security • Decline in agricultural sector 	<ul style="list-style-type: none"> • Over extraction (Saline intrusion) • Inefficient water delivery (high losses) • Improper use of water (e.g., sugarcane) • Limited irrigation infrastructure (i.e., channeling, pumps etc) • Limited small-scale irrigation infrastructure – mainly large-scale systems supporting traditional crops • Limited funding – insufficient government funds, • Unattractiveness in terms of private investment 	<ul style="list-style-type: none"> - Policy on irrigation not finalized included the issue of pricing) - Under funding of N.I.C - Inability to attract investment in irrigation infrastructure - Absence of improved irrigation technology 	<ol style="list-style-type: none"> 1. Expand and develop irrigation infrastructure large-scale and small-scale 2. Develop policy to promote investment in irrigation 3. Improve efficiency of irrigation technology 4. Develop economic instruments and water policy including pricing

<p>5. Rural poverty increased</p>		<ul style="list-style-type: none"> • Decline in agriculture • Unavailability of water • Lower incomes from farming • Lack of infrastructure to support and develop rural economy • Few employment opportunities outside of agriculture • Occurrence of natural disasters • Loss of knowledge and culture • Impact of • Lack of public awareness 	<ul style="list-style-type: none"> - Public policy not supportable of creating and enabling an environment for rural development - Limited access to credit (financing) - Insufficient/limited marketable skills - Inadequate budget allocation - Lack of economic incentive framework to encourage private sector investment - Absence of irrigation - Rainfall dependent agriculture - Out dated development order - No human settlement policy 	<ol style="list-style-type: none"> 1. Improve infrastructure (roads, water etc.) 2. Develop effective rural development policy 3. Develop economic instruments/Improve access to financing 4. Implement land tenure programmes 5. Implement small-scale irrigation systems 6. Develop of agro-forestry (alternative livelihoods) 7. Develop drought early warning system
<p>6. Land un-rehabilitated</p>		<ul style="list-style-type: none"> • Absence/Lack of resources (financial/technical/HR) • Inadequate/enforcement • Inadequacy of legal framework • Inefficient planning (operators/government) • Inappropriate practices (mineral extraction) • Creation of road access particularly in bauxite sector • Clearance for extraction of minerals 	<ul style="list-style-type: none"> - Lack materials for restoration - Insufficient information/experience on alternative restoration methods - Lack of environmental awareness - Lack of knowledge/know how - Poor planning (restoration and closure plans) 	<ol style="list-style-type: none"> 1. Develop more effective institution coordination and more effective planning of framework 2. Train operators and regulators trained 3. Implement effective policy and legal framework 4. Conduct research on alternative land restoration techniques

Annex 6: Stakeholder Involvement in Project Implementation

Stakeholder	Stakeholders interest in SLM	Justification for inclusion of stakeholder	Expected role of stakeholder
Forestry Department	Project coordination, agro-forestry, institutional strengthening, policy development	Responsible for country's forest reserves and executing Nation Forest Plan	Project coordination and management; executing two of six demonstration projects. Staff will receive training, GIS resource persons and research findings
MLGE	Policy development	Focal Point for CCD, CBD and other international environmental conventions	Member of PSC, policy development, legislative reforms
MoFP	SLM financing	All GEF projects have to be channeled through this Ministry	Facilitates government commitments to financing CCD NAP implementation and SLM
MAL	Policy development, institutional strengthening	Guides development of the agricultural sector; land distribution for both agricultural use and human settlement.	Member of PSC, policy development, legislative reforms; Staff to be trained in land management tools, including GIS
MHTWW	Policy development	Mandate for water and human settlement sectors	Member of PSC, policy development, legislative reforms
MITEC	Fosters investment in productive capacity and use of new technologies	Mandated to spearhead industrial modernization; to promote development of small and micro-enterprises	Expected to provide grants for the technological development of the agricultural sector
RPPD	Land use proposals, crop zoning, institutional strengthening	Mandate for land capacity assessment data on agricultural lands	Formulation of land utilization and zoning strategies
RADA	Development of early warning system for drought, soil husbandry training, institutional strengthening	Responsible for agricultural extension services	Resource persons for SLM training on soil conservation; To be involved in three of the five demonstration projects
NIC	Development of small-scale irrigation infrastructure	Manage, operate, maintain and expand such existing and future irrigation schemes	Resource persons in the installation and effective operation of small scale systems
JBI	Development of land rehabilitation techniques due to bauxite mining	Regulation of the bauxite sector	Resource persons and research findings on land rehabilitation disseminated to mining sector, and used for policy formulation and planning
Mines and Geology	Development of land rehabilitation techniques of limestone quarry and bauxite mining	Regulates mineral extraction	Resource persons and research findings on land rehabilitation disseminated to mining and quarry sector, and used for policy formulation and planning
NEPA	Biodiversity conservation and watershed management	Regulates environmental management	Member of PSC, policy development, legislative reforms
PIOJ	Project approval, policy development, R&D for planning and development	Initiating and coordinating the development of plans, programs and policies for the economic, financial social, cultural and physical development of Jamaica, research on national development issues	Finalization Sustainable Rural Development Policy, Mainstreaming of policy into development planning

Stakeholder	Stakeholders interest in SLM	Justification for inclusion of stakeholder	Expected role of stakeholder
JCDT	In-kind co-financing; reforestation and wildlife conservation activities; public education campaign	Responsible for the management of the Blue Mountains and John Crow National Park	Resource organization for networking with local farmers and communities; Implementation of wildlife conservation and natural resource management programmes in and around the BMJCNP
User Groups: Farmers, communities, private sector	Demonstration projects on small-scale irrigation infrastructure, land rehabilitation techniques, agro-forestry, soil conservation and appropriate cultural practices	The effectiveness and sustainability of SLM can only be achieved by ensuring stakeholder involvement in the definition of the problem that affects them, and development of workable solutions	Trainees; Provision of land, time labour and resources

Annex 7: Terms of References (ToRs)

UNDP/GEF project 3726: Capacity Building for Sustainable Land Management in Jamaica

A. Background

Jamaica's policy, regulatory and institutional framework for sustainable land management (SLM) is currently fragmented, contributing to ineffective implementation and increasing land degradation. While the mandates and work plans of a number of institutions touch on issues related to sustainable land management, there is no sustainable land management programme nor do any of the existing government policies address the issue directly. Despite policies and activities that contribute to minimizing or preventing land degradation, they are neither complete nor strategically linked, the result of which is that SLM is not fully understood nor appreciated.

The main global benefit expected from this project is improved integrated management of land resources to prevent land degradation. In particular, global benefits include:

- Maintenance of the critical structure and functions of ecological systems;
- Enhanced biodiversity conservation due to reduced deforestation and reduced sedimentation loads in lagoons and coastal areas including coral reefs; and
- Enhanced carbon sequestration resulting from increased land rehabilitation through afforestation and reduced deforestation.

Project activities will also deliver important national benefits through enhanced capacities for sustainable land management, rural development and drought management. National benefits include:

- Enhanced agricultural productivity;
- Improved rural development strategies;
- Protection of watersheds;
- Conservation of biodiversity;
- Reduced risks of natural disasters, e.g., drought; and
- Reduce rural to urban immigration.

B. Project Goal and Objective

This project's long-term goal is to prevent and arrest land degradation by institutionalizing sustainable land management practices in such a way that national socio economic priorities are met while at the same time contribute to achieving the objectives of the CCD. The objective of this project is to enhance sustainable land management through a) the integration of sustainable land management within decision-making and development planning; and b) the strengthening of capacities to implement best practices for sustainable land management.

C. Project Outcomes

Two main outcomes are planned for in this project. Outcome 1 is that sustainable land management will be mainstreamed into national policies, plans and their attendant institutions. Outcome 2 is that technical capacities to implement sustainable land management will be demonstrated and institutionalized.

The expected project outcomes of mainstreamed and improved capacities for implementing SLM is that ecosystem integrity will be better preserved and sustainable livelihood options and social well-being for rural communities will be greatly enhanced. These outcomes are specific responses to Jamaica's obligations to fulfilling Articles 5(b) and 5(e) of the United Nations Convention to Combat Desertification and Drought (CCD).

D. Technical Assistance Assignments and Functions

The project will contract local and international expertise to provide a number of services outlined in the project work plan. These include Lead Land Degradation Expert (LLDE), Land Management Consultant (LMC), Independent Land Management Expert (local and international LME).

1. Lead Land Degradation Expert

The Lead Land Degradation Expert (LLDE) will be a Jamaican or Caribbean national whose primary role is to facilitate the policy consultations necessary to reconcile disparate land management policies and activities through an overall policy framework for the implementation of SLM. Reporting to the Conservators of Forests, the LLDE will be responsible for the implementation of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. The LLDE will head a small project management unit, the operations of which are co-financed by the GoJ, and will be accountable to the Conservator of Forests, the Project Steering Committee and UNDP.

Duties and Responsibilities

1. Lead policy consultations with government decision-makers, private sector, NGO representatives, academia and civil society representatives in the assessment of land management policy conflicts and negotiation of policy and institutional adjustments and gap-filling;
2. Provide overall coordination of project activities;
3. Finalize the ToRs for the Land Management Consultants (2x), International Land Management Expert(s), and all sub-contractors;
4. Coordinate the recruitment and selection of project consultants and personnel;
5. Supervise and coordinate the work of all project staff, consultants and sub-contractors;
6. Work closely with project partners to closely coordinate all the stakeholders involved with achieving project outcomes, outputs and activities;
7. Prepare project progress reports and implementation documents, as required by GoJ and UNDP;
8. Disseminate project reports to and respond to queries from concerned stakeholders;

9. Report project progress to the Project Steering Committee quarterly;
10. Oversee the exchange and sharing of experiences and lessons learned with relevant conservation and development projects nationally and internationally;
11. Prepare annual Lessons Learned Reports (3X); and
12. Preparing a detailed annual work plan for the project.

Selection Criteria

1. Post-graduate degree in environmental management or other relevant academic and profession qualifications with at least 10 years professional experience;
2. Proven extensive experience and technical ability to manage a large project and a good technical knowledge in the fields related to SLM, participatory approaches and/or environmental economics;
3. Effective interpersonal and negotiation skills proven through successful interactions with all levels of project stakeholder groups, including senior government officials, business executives, farmers and communities;
4. Ability to effectively coordinate a complex, multi-stakeholder project;
5. Ability to lead, manage and motivate teams of consultants to achieve results;
6. Good capacities for strategic thinking and planning;
7. Excellent communication skills;
8. Knowledge of UNDP project implementation procedures, including procurement, disbursements, and reporting and monitoring highly preferable;

Duration of the assignment: 150 staff weeks.

2. Land Management Consultant

The Land Management Consultant (LMC) will be a Jamaican or Caribbean national whose primary role is to undertake a number of technical assessments and drafting of technical reports, as well as to facilitate a number of the training workshops. The LMC will participate in many of the policy consultations with the LLDE and stakeholders as part of his/her work. The LMC will report to the LLDE, and be accountable to the Conservator of Forests and UNDP.

Given the amount of technical work to be undertaken, particularly in the first year, two LMCs will be contracted. These ToRs include roles and responsibilities to be undertaken by both, subset of which will be specified in the individual contract.

Duties and Responsibilities

1. Undertake technical consultations with government representatives, private sector, NGO representatives, academia and civil society representatives in the assessment of land management conflicts and development of best practicable approaches to sustainable land management. Participate in policy consultations with the LLDE;
2. Preparation of the following reports:
 - a. Assessment of Institutional Capacities for SLM (output 1.2)
 - b. Framework Policy for SLM (with LLDE) (output 1.3)
 - c. Institutional Mandates, Roles, and Responsibilities for SLM (Report and Ministerial Papers) (output 1.4)

- d. Priority Concept Papers for the implementation of SLM (output 1.5)
- e. Identification of Training and Sensitization Needs for SLM (output 2.1)
- f. SLM Training Programme (output 2.2)
- g. Develop the MSP demonstration project concepts in project documents (output 2.4)
3. Facilitate and provide training in SLM policy dialogues and workshops; and
4. Prepare Lessons Learned of the demonstration projects.

Selection Criteria

1. Post-graduate degree in land management or other relevant academic and profession qualifications with at least 10 years professional experience;
2. At least 10 years of demonstrated working experience in areas relevant to sustainable land management using participatory approaches; Experience that emphasizes on land degradation arising from mineral ore extraction, agriculture and agro-forestry in sub-tropical maritime climates and mountainous ecosystems is especially desirable;
3. Effective interpersonal and negotiation skills proven through successful interactions with all levels of project stakeholder groups, including senior government officials, business executives, farmers and communities;
4. Good capacities for strategic thinking and planning;
5. Excellent communication skills;

Duration of the assignment: 110 staff weeks.

3. Natural Resource Sociologist

The Natural Resource Sociologies (NRS) will be a Jamaican or Caribbean national whose primary role is to undertake the two required SLM surveys at the outset and mid-point of project implementation. The NRS will work with the LMC and LLDE to administer the surveys to project stakeholders. The NRS will report to the LLDE, and be accountable to the Conservator of Forests and UNDP.

Duties and Responsibilities

1. Administer three surveys: a) Survey on public awareness of SLM; b) land users' satisfaction with SLM training and support; and c) a final broad-based stakeholder survey to assess the uptake of SLM attitudes and training on SLM. Attachment II of the UNDP/GEF Resource Kit on Monitoring, Evaluation and Reporting SLM for LDC and SIDS will be used.
2. Undertake a statistic analysis of the survey results and prepare report.

Selection Criteria

1. Post-graduate degree in natural resource or rural sociology, or related environmental management field with strong survey and statistical analysis components;
2. At least three years experience in analyzing social surveys;
3. Experience in designing, administering, and analyzing social surveys in the Caribbean;
4. Very good interpersonal and communication skills with a diverse group of social actors are very important, including senior government officials, business executives, farmers and communities.

Duration of the assignment: Nine (9) staff weeks

4. International Land Management Experts

The primary role of the International Land Management Expert (ILME) is to undertake an independent mid-term evaluation of the project (ILME 1); and an independent final evaluation of the project (ILME 2). At the discretion of the UNDP Country Office, the same international expert or different international experts may be contracted to undertake these evaluations. The ILME will report to UNDP.

Duties and Responsibilities

1. Undertake technical consultations with government representatives, private sector, NGO representatives, academia and civil society representatives to assess the project performance and delivery;
2. Preparation of the Independent Mid-Term Evaluation (Output 3.1.6)
3. Preparation of the Independent Final Evaluation (Output 3.1.7)

Selection Criteria

1. Post-graduate degree in land management or other relevant academic and profession qualifications with at least 10 years professional experience;
2. At least 10 years of demonstrated working experience in areas relevant to sustainable land management using participatory approaches; Experience that emphasizes on land degradation arising from mineral ore extraction, agriculture and agro-forestry in sub-tropical maritime climates and mountainous ecosystems is especially desirable;
3. Effective interpersonal and negotiation skills proven through successful interactions with all levels of project stakeholder groups, including senior government officials, business executives, farmers and communities;
4. Good capacities for strategic thinking and planning;
5. Excellent communication skills;

Duration of the assignment: Mid-term evaluation: Four (4) staff weeks; Final Evaluation: Six (6) weeks

5. Land Management Expert

The Land Management Consultant (LMC) will be a Jamaican or Caribbean national whose primary role is to undertake an independent evaluation of the SLM Training Programme and the SLM Demonstration Project Concepts. The LMC will report to the LLDE, and be accountable to the Conservator of Forests and UNDP. Two separate experts may be contracted or the same expert for both evaluations, but they should be independent of the project in all other ways.

Duties and Responsibilities

1. Undertake technical consultations with government representatives, private sector, NGO representatives, academia and civil society representatives in the assessment of land

management conflicts and development of best practicable approaches to sustainable land management

2. Undertake an evaluation of the SLM Training Programme to assess its technical soundness and merits, including opportunities and risks for its implementation.
3. Undertake an evaluation of the SLM Demonstration Project Concept papers to assess their scientific and technical merits, with the context of socio-economic and political realities.

Selection Criteria

4. Post-graduate degree in land management or other relevant academic and profession qualifications with at least 10 years professional experience;
5. At least 10 years of demonstrated working experience in areas relevant to sustainable land management using participatory approaches; Experience that emphasizes on land degradation arising from mineral ore extraction, agriculture and agro-forestry in sub-tropical maritime climates and mountainous ecosystems is especially desirable;
6. Effective interpersonal and negotiation skills proven through successful interactions with all levels of project stakeholder groups, including senior government officials, business executives, farmers and communities;
7. Good capacities for strategic thinking and planning; and
8. Excellent communication skills

Duration of the assignment: Eight (8) staff weeks

6. Project Steering Committee (PSC)

The PSC will membership will be drawn from key stakeholder organizations, including civil society. The Committee will be chaired by the Conservator of Forest. The CCD Focal Point and an UNDP representative will also be members of the Committee.

The principal tasks of the SC are the following:

1. Provide high-level orientation and guidance for the project.
2. Provide technical guidance for the PMU.
3. Review, comment and approve project deliverables.
4. Ensure that the project develops in accordance with national development objectives, goals and policies.
5. Pay special attention to the assumptions and risks identified in the log frame, and seek measures to minimize these threats to project success;
6. Ensure collaboration between institutions and free access on the part of project actors to key documents, land information systems, remote sensing imagery, etc.
7. Pay special attention to the post-project sustainability of activities developed by the project.
8. Ensure the integration and coordination of project activities with other related government and donor-funded initiatives.

E. Contractual Services

The venue costs associated with undertaking the following services will be met through contractual agreements. These include the provision of conference services, light fare and appropriate supplies (e.g., rental of audio-visual equipment):

- a. Policy workshop to discuss the findings and draft recommendations arising from an in-depth assessment of the policy and regulatory framework for a coherent implementation of SLM (output 1.1)
- b. Stakeholder workshop to discuss the findings and draft recommendations arising from an in-depth assessment of the institutional capacities necessary to effect SLM (output 1.2)
- c. Stakeholder workshop to finalize and approve an overall Framework Policy for SLM for Cabinet submission (output 1.3)
- d. Stakeholder workshops to initiate and organize government agency staff to transition into new roles and responsibilities for SLM (output 1.4)
- e. Stakeholder workshop to identify SLM training skills and public sensitization needs (output 2.1)
- f. Stakeholder workshop to finalize SLM training programme (output 2.2)
- g. Stakeholder workshop to provide training on SLM (output 2.3)
- h. Stakeholder workshop to provide SLM training directly related to each of the five (5) demonstration projects (output 2.3)
- i. Public awareness presentations to sensitize the public on the value and needs of pursuing SLM (output 2.3)
- j. Stakeholder workshops to undertake a participatory evaluation of each of the demonstration projects (5x) (output 3.1)

In addition to the sub-contracts for the policy dialogues and stakeholder workshops, a sub-contract will be issued for the publication of the SLM training and public awareness material. This sub-contract will be to convert the material prepared by the LMC into SLM brochures and other public awareness material, as well as into a glossy manual on SLM.

Sub-contracts will also be provided to execute each of the five (5) demonstration projects. The winning sub-contracted agency will be responsible for executing the demonstration project developed by the LMC. To this end, the contracted organization will work with the LLDE, Conservation of Forests and the LMC to test SLM best practices in the respective demonstration sites.

Qualifications

The sub-contracts will be contracted to an established hotel or center that provides conference services (for the policy dialogues and stakeholder workshops), publishing (for the SLM publications), and organizations with a proven track record and absorptive capacity to execute community-based land management projects (output 2.4). Organizations that have a proven record of working with stakeholder communities are especially desirable. At least three such business enterprises will be requested to tender a competitive bid for contracting these services. UNDP, in consultation with government counterparts, and in keeping with UNDP rules and regulations, will select the winning bid.

All sub-contracts will be developed during MSP implementation by the LLDE, in consultations with the Conservator of Forests, Project Steering Committee and UNDP.

F. Work Schedule

The assignments are to be implemented according to the work plan and timeframes specified in the project document. The Provisional Work Plan will be reviewed and finalized by the Project Steering Committee, and will provide planned start dates and expected dates of completion. Certain assignments may not be able to begin at its scheduled time if unforeseen consequences prevent the completion of prerequisite assignments. For example, the preparation of the SLM Training Programme can not begin until stakeholder workshops have been convened to deliberate and agree on the proposed SLM Training Programme. Prior to initiating institutional re-organization of roles and responsibilities for SLM, the Cabinet needs to approve institutional recommendations, followed by the preparation of Ministry Papers.

The preparation of the final lessons learned report will be best scheduled upon completion of the independent final evaluation. The scheduling of project tasks will be the subject of on-going review by the LLDE, with periodic review by the Project Steering Committee and UNDP. Project monitoring and evaluation will play a central role in ensuring that project activities are timed and adapted in such a way as to minimize the negative impacts of unforeseen consequences, as well as to reduce their risks. M&E reports, stakeholder consultations and workshops, and the Project Steering Committee will be used to facilitate an adaptive collaborative management approach to project implementation.

G. Remuneration and other conditions

Contracts will be issued by UNDP, with remuneration paid according to an agreed schedule. Travel expenses connected to the completion of assignment tasks, if necessary, will be reimbursed separately according to UNDP rates.

Annex 8: Additional Project Information

1. Outcome Indicators

1. The project objective would be indicated by the national policy framework governing land management being guided by an overall policy on sustainable land management, supported by strengthened institutional capacities. Two main outcome indicators are proposed to assess the effectiveness and institutional sustainability of project outputs. These will be measured qualitatively, through consultations and content analysis of project-related documentation. Output indicators will serve as more immediate and quantifiable measures of project performance and impact. Upon completion of the project, the independent final evaluation will serve to make some assessment as to the success achieved in promoting and implementing sustainable land management. However, as a medium-size project of three-year duration, this project is limited in being able to demonstrate long-term outcomes in combating land degradation. Therefore, to complement the final evaluation of outcomes, a second evaluation should be undertaken three years after project completion. The non-GEF financing of this second evaluation is included in output 1.5.

2. Outcome 1 Indicator: Political will and public opinion drive the SLM mainstreaming process. An independent final evaluation at the end of the project will be undertaken to assess the effectiveness of the GoJ's policy interventions to promote and implement sustainable land management. Such an assessment will pay particular attention to the adaptability of institutional structures in maximizing synergies and reducing conflicts and detrimental unintended consequences. This assessment will be compared to the baseline assessment undertaken (outputs 1.1 and 1.2).

3. Outcome 2 Indicator: Increased use of sustainable land management practices. An assumption is made that the increased use of sustainable land management practices translates into an effective prevention and remediation of land degradation. The final evaluation will assess the extent to which the five demonstration projects have been extended and replicated to other parts of Jamaica, and will be compared to the baseline assessment and mapping of land use practices undertaken as part of output 1.4. Given that the measure of this outcome may need more than three years of this project's life cycle, a stronger measure will be necessary through an independent assessment undertaken three years after project completion.

2. Output Indicators

4. The matrix of the project logical framework (Annex 5) links project outcomes and outputs to the existing baseline activities, indicators, target values and assumptions. The following output indicators serve to confirm the delivery of quality project outputs. These are not to be confused with the means of verification of the outputs, such as reports. Instead, these output indicators are being measured against criteria of quality and sustainability, which will be assessed by an independent expert. Importantly, outputs 1.4 and 1.5 will be submitted to the Jamaican Cabinet for formal approval, resulting in a Cabinet Decision. The latter will provide the basis for relevant ministries to produce Ministerial Papers, which formally and legitimately changes

agency mandates. This process is central to strengthening the project's legitimacy and as well institutional sustainability.

5. In addition to negotiating agreements and commitments with stakeholders individually and through policy dialogues and workshops, a survey will be undertaken to measure the level of public awareness of SLM and another to measure satisfaction with the level of SLM technical support. These two surveys will be undertaken at the outset of the project and mid-way through project implementation, and administered to have an effective statistical sample of at least 250. Building upon the Monitoring and Evaluation Resource Kit prepared by UNDP/GEF, the surveys will serve as key means to measure project performance and impact.

- Indicator 1.1a: A consensus of key stakeholders (90%, n>250) and their representatives agree on the findings and recommendations to improve the policy and regulatory frameworks for SLM.
- Indicator 1.1b: PSC endorsement of report
- Indicator 1.2a: A consensus of key stakeholders and their representatives (>90%, n>250) agree on the findings and recommendations to improve the capacities of key GoJ and civil society organizations in implementing SLM.
- Indicator 1.2b: PSC endorsement of report
- Indicator 1.3a: A consensus of key stakeholders and their representatives (>90%, n>250) agree that the framework policy for sustainable land management developed is: a) holistic; b) legitimate; c) coherent and cohesive; d) politically expedient; and d) economically feasible.
- Indicator 1.3b: Independent international expert on SLM provides a high rating on the quality of output 1.3. (Terms of Reference will be prepared for a qualitative assessment that measures the mainstreaming of SLM within the existing policy framework for land management).
- Indicator 1.3c: PSC endorsement of framework SLM policy
- Indicator 1.3d: Cabinet decision endorsement of framework SLM policy
- Indicator 1.4a: New and revised institutional mandates, roles and responsibilities for combating land degradation successfully negotiated among key stakeholders involved in SLM. Report produced.
- Indicator 1.4b: PSC endorsement of SLM institutional reforms; Letters of endorsement from Ministers, Heads of Agencies, and key stakeholder representatives, e.g., NGO associations, private sector associations, civil society groups
- Indicator 1.4c: Cabinet decision endorsement of SLM institutional reforms
- Indicator 1.4d: Ministerial Paper directing relevant agencies to re-organize and re-prioritize programme activities based on Cabinet Decisions 1.3d and 1.4c.
- Indicator 1.5a: Key stakeholder representatives (>90%, n>250) agree that the Medium-Term Investment Plan (MTIP) details realistic sources of financing for implementing SLM within the framework of the CCD NAP.
- Indicator 1.5b: The MTIP details project concepts and identify sources of finances for replicating and extending the demonstration projects to other areas. More than 75% of MTIP financing comes from national sources (e.g., government budgetary appropriations, private sector grants).
- Indicator 1.5c: Cabinet decision endorsement of MTIP
- Indicator 1.5d: By the end of the project, 65% of MTIP financing committed.

- Indicator 2.1: A consensus of key stakeholders and their representatives (>90%, n>250) agree that the training and sensitization needs in SLM skills identified in output 2.1 represents true needs.
- Indicator 2.2: A consensus of key stakeholders and their representatives (>90%, n>250) agree that the training programme on best practices for sustainable land management (output 2.2) developed.
- Indicator 2.3a: One policy dialogue held each year on strengthening the policy and regulative frameworks for implementing SLM. Policy dialogues participants are mid- to senior-level government officials, non-governmental organizations, private sector, and academicians.
- Indicator 2.3b: Two training workshops held per year to impart best practices on SLM demonstrated under the project. Workshops are held in the affected rural areas with rural stakeholder farmers and resource users.
- Indicator 2.3c: Increased technical capabilities on SLM²²
- Indicator 2.3d: Public awareness of SLM significantly raised (statistical analysis of survey results²³)
- Indicator 2.3e: Increased satisfaction of land users' with SLM support (statistical analysis of survey results²⁴)
- Indicator 2.4a: The five demonstration projects designed are reviewed by an independent international expert on sustainable land management, and approved by the Project Steering Committee prior to implementation. Post-implementation, these projects will be evaluated by a separate independent final evaluation expert on SLM.
- Indicator 2.4b: Annual reports on lessons learned from the demonstration of SLM techniques prepared and widely disseminated (output 3.1)

3. Risks and Assumptions

6. The main barrier to sustainable land management in Jamaica is the fragmented policy framework and inadequate coordination among sectoral agencies responsible for policy interventions. This creates inefficiencies in the use of limited resources, and more seriously results in conflicting interventions. The main risk to this project is that jurisdictional management by government agencies will not easily facilitate inter-agency policy coordination and implementation. The central rationale underlying the design of this project is address this specific challenge, setting out to strengthen inter-agency consultative processes towards developing a holistic framework to land management, and improving the policy framework by addressing gaps and weaknesses.

7. This project therefore places a great premium of policy coordination and harmonization on

²² At the beginning and end of each workshop, participants will be tested on their knowledge of SLM practices. A comparison of these results will indicate the quality of training imparted, and disaggregated by the social location of trained stakeholder, e.g., technical officer of WRA, project developer of JBI, or coffee farmer. Further details on the construct of the training workshops and indicators of success will be undertaken as part of output 2.2. At the end of the project, a broad-based survey (n>500) will be undertaken to assess the uptake of awareness and capacities of SLM practices.

²³ This survey will be developed and implemented to a large sample of diverse stakeholders, n>250.

²⁴ This survey will be developed and implemented to a large sample of rural land users, n>250

best practices for sustainable land management, reflected by the detailed attention to stakeholder involvement and political commitment. Adaptive collaborative management will be the catalytic framework to minimizing risks of legitimacy and accountability from key stakeholders, as well as ensuring that the critical stakeholder experiences are factored early on in the design of recommended improvements to land management, for example, as demonstrated through the pilot projects.

8. There is an implicit assumption that the Government of Jamaica will remain committed to meeting its obligations under the CCD. Given this, each of the project's five outputs designed to operationalize outcome 1 are to be submitted to the Jamaican Cabinet for endorsement after each government agency and ministry has formally approved the relevant reports. A strong indication of the GoJ's commitment to pursue SLM will be reflected by the Cabinet's decision to approve and pursue regulatory reforms necessary to institutionalize project recommendations. For example, the Jamaican Parliament may be required to formalize revised mandates, roles and responsibilities among government agencies (output 1.4).

9. The second important risk to project success lies in the commitment of financial resources to the key institutions mandated to implement SLM. The support of international and bilateral donors is an important source of investment to land management, serving to develop national capacities. This UNDP/GEF likewise provides grant funding to demonstrate and providing training on implementing best practices for SLM. However, overseas development assistance can not be relied upon to provide the resources necessary to prevent land degradation throughout Jamaica. If sustainable land management is itself to be sustainable, it must be financially sustainable. Thus, the GoJ must demonstrate long-term political commitment to SLM by allocating the recommended budgetary allocations to agency SLM programmes and projects. Output 1.5 is a first step to enabling this process by rationalizing and prioritizing a holistic investment plan (MTIP) of sustainable land management, comprising existing and planned activities. This plan is to be submitted to the Jamaican Cabinet for endorsement, and followed up by policy (including parliamentary) negotiations to approved budgetary appropriations over the medium-term (seven to ten years).

10. Another project assumption is that all key stakeholder organizations remain committed to collaborate on integrated approaches to sustainable land management, including sharing information pertinent to SLM. There is a strong likelihood that project dynamics will catalyze this stakeholder commitment. However, once the project is completed, if project benefits have not been adequately institutionalized, this momentum will be lost and stakeholders will revert to "business as usual". This poses a serious risk to project success, which will be addressed by the emphasis to on-the-ground demonstration activities on best practices for sustainable land management. Not only will these demonstration projects help prevent and remediate land degradation, but rural communities are expected to derive important economic benefits. For example, small-scale farmers will benefit from increased agricultural yields through rainfall harvesting and water conservation techniques. Small rural farmers may benefit from agro-forestry as an alternative livelihood option in areas that help minimize landslides and soil erosion.

4. Sustainability

11. The sustainability of project outcomes relies on a) political commitment to pursue sustainable land management; b) strengthening the policy and regulatory framework for effective implementation of SLM; c) institutionalizing a critical mass of expertise in SLM; and d) ensuring economic revenues from SLM that result in best practices being employed.

12. This project is specifically targeted and designed to make best practices for land management sustainable, hence the title. By design, the project will strengthen the policy and regulatory framework and demonstrate best practices for SLM. The project will help institutionalize best practices for SLM by catalyzing institutional reforms among stakeholder agencies to improve information sharing and collaboration. Sustainability is also ensured by the Medium-Term Investment Plan (output 1.5), which serves to further institutionalize policy and organizational reforms beyond this three-year MSP. Political commitment, however, remains a project risk for which the project has limited control (see paragraph 8 above). This project will facilitate political commitment to SLM by negotiating financial commitments to CCD NAP priorities and SLM activities within the framework of the MTIP.

13. In order to increase the sustainability of project outcomes, adaptive collaborative management will be the underlying approach to project implementation. With the project goal and objective being the central foci, management activities will be carried out to ensure full and active involvement of stakeholders throughout planning and decision-making processes. In so doing, the validity, accountability and legitimacy of project activities are always tested and confirmed. Stakeholders will also interact regularly with the project management to minimize the risk of unintended consequences, allowing for timely adjustment of project activities.

14. The sustainability of project outcomes will also be facilitated by the use of specialized expertise to ensure the highest quality of best practices for SLM appropriate to Jamaican environmental (e.g., ecology, hydrogeology, and climatic) and socio-economic conditions (e.g., culturally appropriate livelihood options). International expertise will be sought to impart best practices and successes, as well as learn from failures, from other parts of the world.

15. The sustainability of project outcomes will be further enhanced by a long-term training programme on SLM that continues after the completion of this MSP. Output 2.2 will develop and initiate this training programme, the continued implementation of which is to be funded among the programmes in the MTIP. The capacities developed within the construct of this project will facilitate the sustainability of outcomes if training is targeted to the right stakeholder representatives²⁵ and at sufficient numbers to build a critical mass of human capacities (to minimize loss of institutionalized memory through staff turnover) for SLM. The demonstration projects are another important project component that will facilitate project sustainability by demonstrating economically viable SLM alternatives to rural communities.

16. The likelihood of the national awareness and capacities strengthened during the project will be further gauged at the end of the project by a broad-based survey (n>500) and a workshop.

²⁵ See Section 9, Stakeholder Involvement.

5. Replicability

17. The potential for replicability is significant, and the project is designed as such. The demonstration projects will serve as key learning sites for the application of best practices for SLM. Rural farmers from other communities that experience similar land degradation issues will be among those participating in order to help develop champions of SLM best practices in other communities. This MSP will complement the baseline activities of existing land management programmes such as the ELP, LAMP and the FAO/MAL project. As part of the consultations and negotiations for institutional reform to promote SLM, lessons learned from this MSP will be used to adapt other existing land degradation programmes, projects and activities in such a way that they too remain relevant, valid and legitimate to the goal of SLM.

18. The MTIP also serves as a mechanism to replicate SLM best practices. In particular, the MTIP is intended to finance the replication of successful approaches to SLM, not only those demonstrated by this project, but any set of activities deemed necessary to institutionalize sustainable land management.

19. The replicability of project outcomes and SLM best practices in general will be greatly enhanced by a more holistic policy and regulatory framework strengthened by the project. The project component will examine and reduce, if not eliminate gaps and weaknesses to SLM, among which was their replicability.

20. Throughout project implementation, periodic workshops will be held (about every 4 – 6 months) to share progress and lessons learned to date from the demonstration projects. These workshops will include officials and rural farmer community representatives, soliciting their perspectives and experiences to help improve project activities (as well as the invited experts and, as appropriate, government officials from other countries using non-GEF resources). These workshops are intended to help build up momentum for other communities to begin the groundwork for future use of SLM best practices and inclusion in the MTIP.

6. Legal Context

21. This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement (SBAA) between the Government of Jamaica and the United Nations Development Programme as signed by the parties on 26 January 1976. The host country-implementing agency shall, for the purpose of the SBAA, refer to the government cooperating agency described in that Agreement.

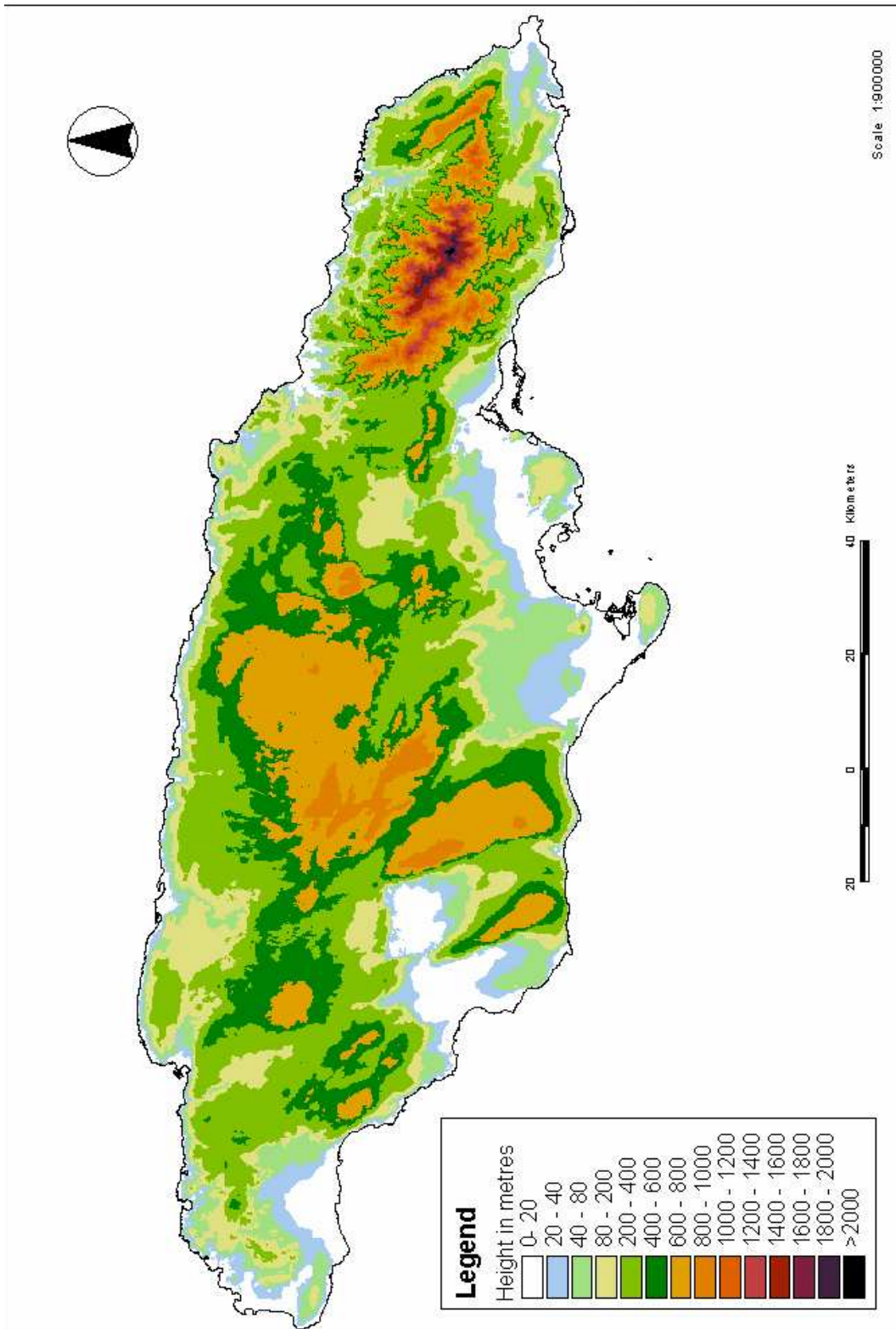
22. UNDP acts in this project as Implementing Agency of the Global Environment Facility (GEF), and all rights and privileges pertaining to the UNDP as per the terms of the SBAA shall be executed '*mutatis mutandis*' to GEF.

23. The UNDP Resident Representative in Jamaica is authorized to effect in writing the following types of revisions to this project document, provided s/he has verified the agreement thereto by the UNDP GEF unit and is assured that the other signatories of the project document have no objections to the proposed changes:

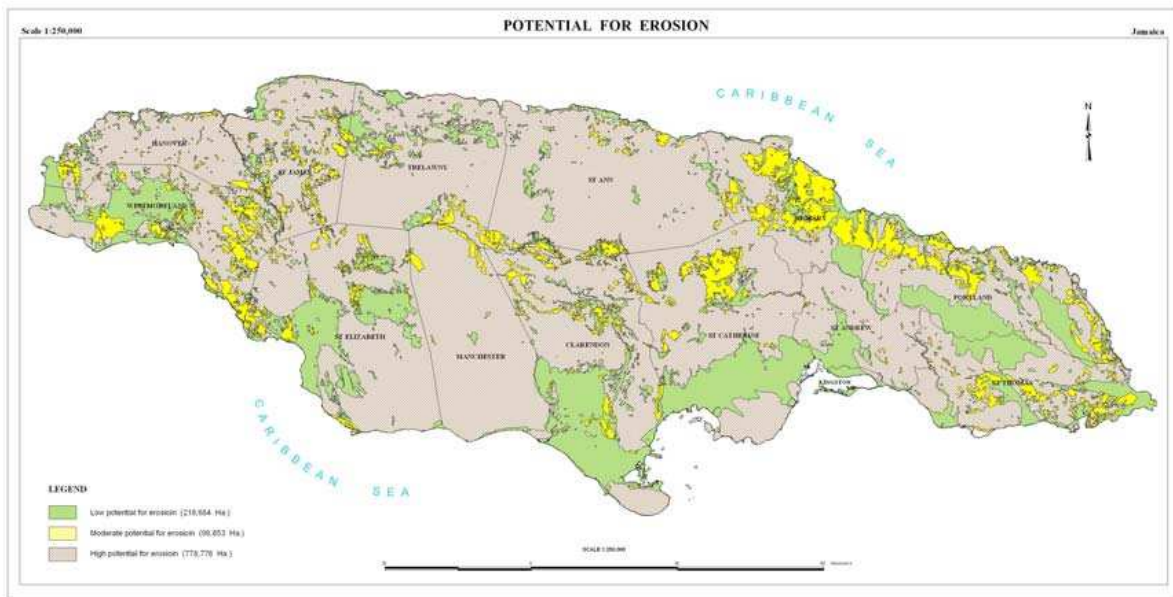
- a. Revisions of, or addition to, any of the annexes to the Project Document;
 - b. Revisions that do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of inputs already agreed to or by the cost increases due to inflation;
 - c. Mandatory annual revisions that re-phase the delivery of agreed project inputs, or reflect increased expert or other costs due to inflation, or take into account agency expenditure flexibility, and;
 - d. Inclusion of additional annexes and attachments relevant to the Project Document
24. Intellectual property rights on data, study results, reports, etc, generated with UNDP/GEF project funds will be the property of GoJ and UNDP.

Annex 9: Maps and Tables

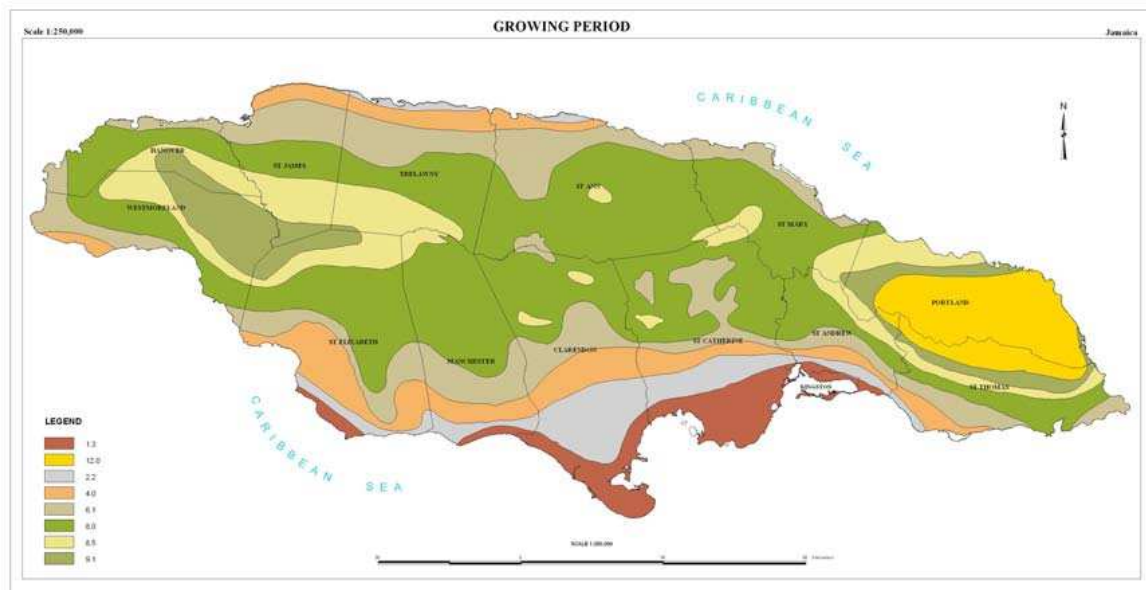
Map 1: Topographical Map of Jamaica



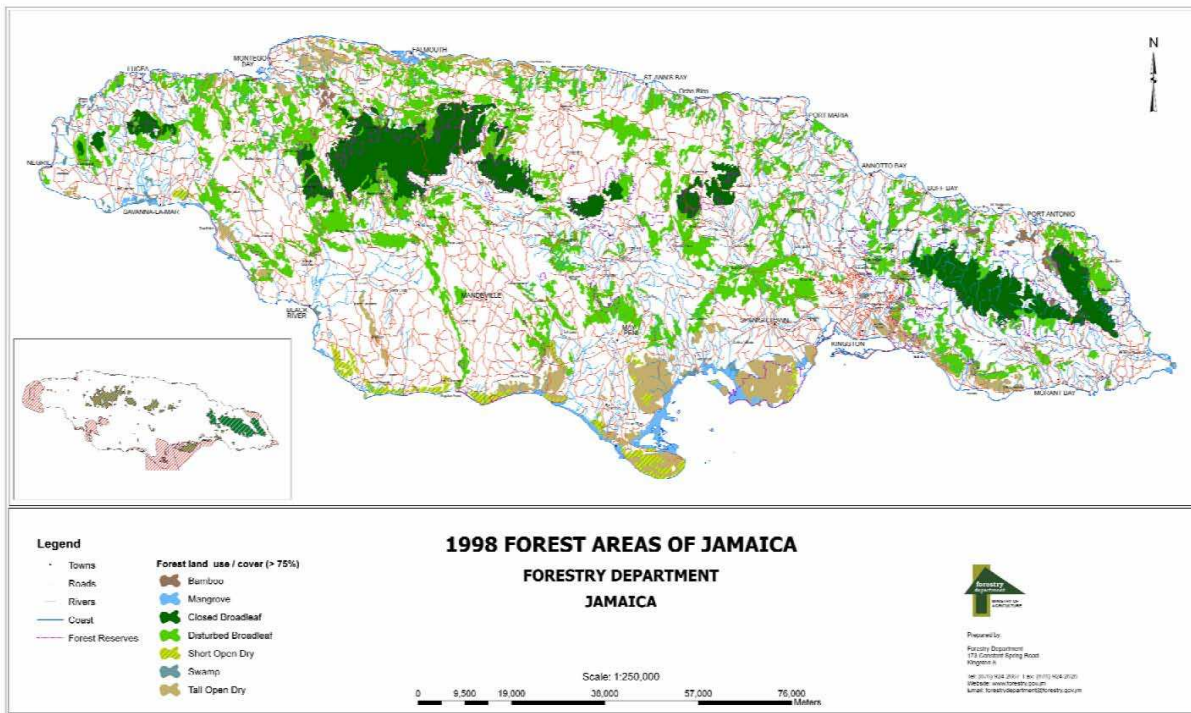
Map 2: Areas of Jamaica with significant potential for soil erosion



Map 3: Growing periods for regions of Jamaica



Map 4: Forested areas of Jamaica



Map 5: Hydrostratigraphy of Jamaica

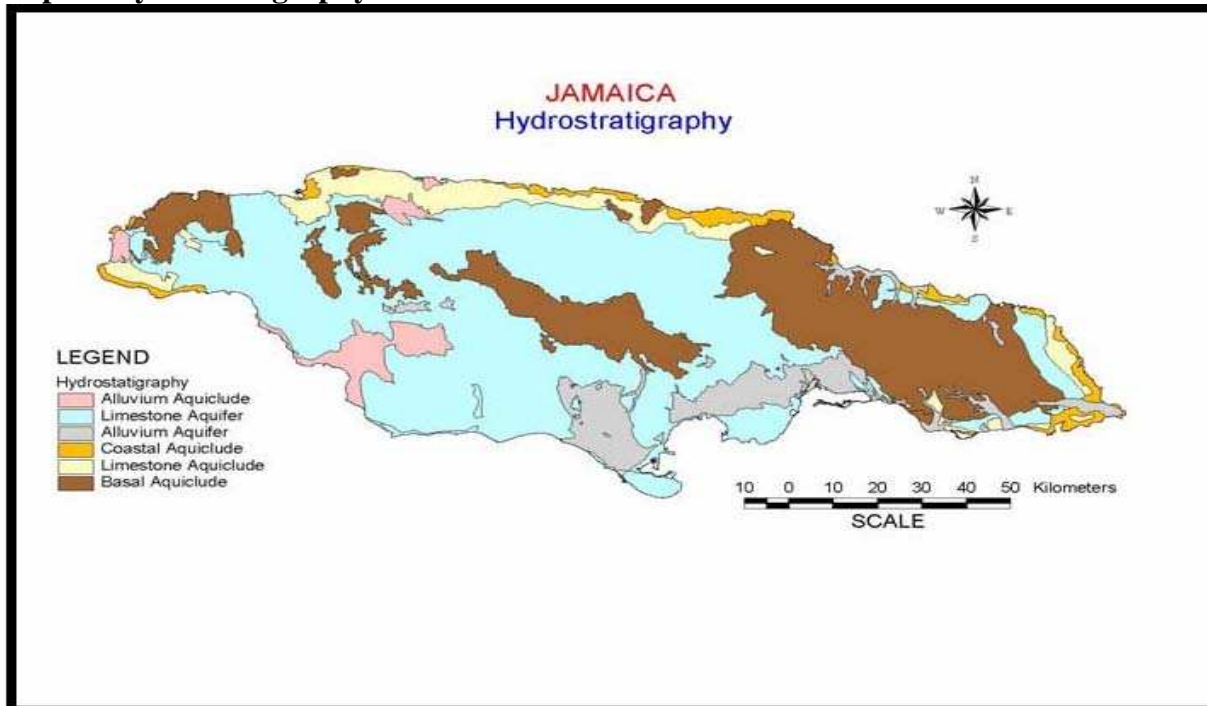


Table 1: Forest cover by type (1954 – 2000)*Jamaica forest cover 1954–1985*

Year	Natural forest (ha) (%)	Forest plantation (ha)	Other wooded land (ha)	Total (ha) (%)	Reference
1954	319,800 (29%)			319,800 (29%)	DOS 1958 <i>In Eyre</i> 1986
1968	260,869 (24%)	4,131	226,252	491,252 (45%)	Gray and Symes 1972
1980	504,453 (46%)	3,709	23,427	531,589 (48%)	CRIES 1982
1985	329,114 (29%)	5,930	218,282	553,326 (48%)	RPPD 1988

Jamaica forest cover 1988–2000

Year	Natural forest (ha) (%)	Forest plantation (ha) (%)	Total forest (ha) (%)	Reference
1988/89	362,012 (33.0%)	3,232 (0.3%)	365,244 (33.3%)	TNC/Grossman <i>et al.</i> 1992
1998	359,365 (32.8%)	10,227 (0.9%)	369,592 (33.7%)	TNC/Li <i>et al.</i> 2000
1989	335,079 (30.6%)	8,856 (0.8%)	343,935 (31.4%)	FD-TFT 1999
1998	332,016 (30.3%)	8,187 (0.7%)	340,203 (31.0%)	FD-TFT 1999
1990			379,000 (35.0%)	FAO 2001b (FRA 2000) ¹
2000	316,000 (29.2%)	9,000 (0.8%)	325,000 (30.0%)	FAO 2001b (FRA 2000)

¹ In the FRA 1990 (FAO 1993, 1995): Total forest 1990 = 254,000 ha (239,000 ha + 15,000 ha).**Table 2: Disturbed lands resulting from mining**

Disturbed Lands	Ha	%age
Area Disturbed for Mining	4,312.82	100
Area completely mined out	3,945.40	90.7
Original pit area restored and certified	2,533.33	54.6
Fringe and marginal lands restored and certified*	1,047.20	
Total area restored and certified	3,580.53	

*44.5% more than actually disturbed

Source: Ministry of Mining and Energy, 2000

Table 3: The Meteorological Drought Index

Percentage of Normal for two consecutive months

Drought condition or status _____

20% Or less Extreme Drought
 21% to 40% Severe Drought
 41% to 60% Normal Drought
 Above 60% No Drought

YR	D/J	J/F	F/M	M/A	A/M	M/J	J/J	J/A	S/O	O/N	N/D
1962			59								
1965			48	48							
1968				57	52						
1969			41								
1970				57							
1971						45					
1972	55										
1975		43	47	55	52	57					
1976						53	56				53
1977			54								
1979	38										
1983											50
1985	58					50	59				
1986								57			
1988					55						
1990						57					
1991	53	51									
1992										47	
1994							35	59			
1995					54						
1997	37			44	30	53					
1998					40	47					
1999					58						
2000	43	56	37	46							
2001			59						58		
2002			49								
2004		53									51
2005		56	11								

Table 4: Species richness and endemism of selected invertebrates and vertebrates (excluding fish) of Jamaica

Terrestrial Fauna	Total indigenous species (n)	Total endemic species (n)	%age Endemic species
Rotifers	211	<21	<10
Land snails	514	505	98.2
Grapsid crabs	9	9	100
Jumping spiders	26	20	76.9
Fireflies	48	45	93.8
Butterflies	133	20	15
Ants	59	6	10.3
Amphibians	22	22	100
Reptiles	43	33	76.7
Shore and sea birds	39	1	2.6
Land bird	67	30	44.8
Bats	39	1	2.6
Other mammals	2	2	100
Source: Terrestrial Animal Assessment Report, 1999			

SIGNATURE PAGE

Country: **Jamaica**

UNDAF Outcome(s): Outcome 3: By 2011 national capacity to ensure equity and equality strengthened, and the population of targeted vulnerable communities enabled to reduce poverty, improve their livelihoods and better manage hazards and the environment

Expected Outcome(s)/: Increased use of Sustainable Land Management Practices and Tools. **SL 3.4:** Sustainable land management to combat desertification and land degradation

Expected Output(s)/: Appropriate and innovative land management practices promoted

Implementing partner: United Nations Development Programme

Other Partners: Forestry Department 9946023

Programme Period: 2007-2010
Programme Component: Environment
Project Title: PIMS 3468: Capacity Building for Sustainable Land Management in Jamaica
Project ID: 00044037
Project Duration: 3 years
Management Arrangement: National Execution

Total Budget	961,000
GEF Trust Fund	475,000
Allocated resources:	486,000
• UNDP regular pgm	45,000
• NGO (JCDT)	316,000
In kind contributions	
• Government	125,000

Agreed by (Planning Institute of Jamaica): _____

Agreed by (Forestry Department): _____

Agreed by (UNDP): _____