

GEF

**PROJECT DEVELOPMENT FACILITY
REQUEST FOR PIPELINE ENTRY AND PDF-B APPROVAL**

AGENCY'S PROJECT ID: n/a
GEFSEC PROJECT ID: n/a
COUNTRY: Eritrea
PROJECT TITLE: Catchment and Landscape Management
GEF AGENCY: IFAD
OTHER EXECUTING AGENCY(IES):
Ministry of Agriculture (MOA),
Ministry of National Development (MND),
Ministry of Land Water and Environment (MLWE)
DURATION: PDF-B, 12 Months
GEF FOCAL AREA: Land Degradation
GEF OPERATIONAL PROGRAM:
OP #15 Sustainable Land Management
GEF STRATEGIC PRIORITY:
SLM 1 and 2 as well as a linkage to BD2 and BD4
ESTIMATED STARTING DATE: May 2006
ESTIMATED WP ENTRY DATE: July 2007
PIPELINE ENTRY DATE: (IF APPLICABLE)


FINANCING PLAN (US\$)	
GEF ALLOCATION	
Project (<i>estimated</i>)	6,000,000
Project Co-financing (<i>estimated</i>)	35,800,000
PDF A	-
PDF B	350,000
PDF C	-
<i>SUB-TOTAL GEF PDF</i>	
PROJECT CO-FINANCING	
GEF Agency (IFAD)	90,000
National Contribution (in kind)	40,000
Others	20,000
<i>Sub Total PDF Co-Financing:</i>	150,000
<i>Total PDF Project Financing:</i>	500,000

RECORD OF ENDORSEMENT ON BEHALF OF THE GOVERNMENT:

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Director General
Department of the Environment
Ministry of Land Water and Environment
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DATE: 08 February 2006

This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the GEF Project Review Criteria for approval.


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ACROYNYS AND ABBREVIATIONS

CBD	Convention on Biological Diversity
CLM	Catchment and Landscape Management
CDD	Community Driven Development
COSOP	Country Strategy and Opportunities Paper
CPMT	Country Programme Management Team
ERN	Eritrean Nakfa
GEF	Global Environment Facility
GM	Global Mechanism
GOE	Government of Eritrea
IDPs	Internally Displaced Persons
IFAD	International Fund for Agricultural Development
I-PRS	Interim Poverty Reduction Strategy
LRDP	The Livestock Rehabilitation and Development Programme (IFAD)
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MLWE	Ministry of Land, Water and Environment
MND	Ministry of National Development
MOA	Ministry of Agriculture
NAP	National Action Plan to Combat Desertification & Mitigate the Effects of Drought
NARI	National Agricultural Research Institute
Nfa	Nakfa (Eritrean currency)
NEPAD	New Partnership for Africa's Development
NGO	Non Government Organisation
NUEW	National Union of Eritrean Women
O&M	Operation and Maintenance
TSU	Technical Support Unit
UNCCD	UN Convention to Combat Desertification
UNFCC	United Nations Framework on Climate Change
UNDP	United Nations Development Programme
UNOPS	United Nations Office of Project Services

PART I - PROJECT CONCEPT

A. SUMMARY

Project Title: Catchment and Landscape Management

A. 1 Project Rationale

1. Eritrea is one of the poorest countries in the world with per capita income estimated at USD 150 in 2003. Its HDI ranking is 155th out of the 175 countries assessed. Around 69% of the population of 4.4 million (2004 estimate) live in rural areas, although agriculture has a share of only 14% of GDP. Rainfed agriculture is the predominant activity for more than half the population, but since independence in 1991, Eritrea has not been able to produce much more than half of its annual food grain requirements even in good rainfall years. The country depends on food aid for a higher proportion of its needs than any other country.
2. Eritrea adopted the Millennium Development Goals (MDG) and has implemented it since 2003. The MDG goals have been aligned to the draft Interim-Poverty Reduction Strategy (I-PRSP) and the National Food Security Strategy (NFSS) prepared recently and awaiting Government endorsement.
3. The I-PRSP and NFSS aim to empower resource users and local government, build capacity in Government, NGOs, civil society, and the private sector. These conditions make the necessary prerequisites for launching these project activities, for sustaining the project and are linked with the national priorities, action plans and programmes (draft I-PRSP, October 2003). The I-PRSP identified 'immediate priorities', two of which focused on agriculture: 'developing and promoting agricultural services that are more responsive to smallholder farmer's stated priority problems and concerns'; and 'establishing an effective and efficient private marketing system for agricultural produce that enables producers to maximise their returns'.
4. Eritrea is suffering from severe land degradation. A number of studies have identified the following key environmental issues: tree loss due to clearing of trees for cropping and fuelwood, and grazing pressure; extensive and severe soil erosion due to overgrazing and inappropriate cultivation; substantial soil nutrient depletion, particularly in cropping lands, due to lack of inputs, crop residue removal, and the increasing and competing use of animal dung as a domestic fuel source; biodiversity loss due to above influences. The net result has been a loss of rangeland and cropland productivity, species diversity, and an resultant increase in the poverty and vulnerability of the poor.
5. The Eritrean National Action Plan to Combat Desertification & Mitigate the Effects of Drought (2002) made the following recommendations: to introduce community land use planning in pilot areas; to assist farmers for in situ conservation of indigenous crops and landraces; to establish gazetted protected areas and enclosure development and conservation activities; develop agro-forestry in farm forestry, understanding and strengthening traditional coping mechanisms, strengthening the capacity of local communities to combat desertification; establishment of local land degradation Committees; undertake community awareness raising campaigns and to distribute improved traditional stoves to reduce burden on tree cutting.
6. Agricultural Development Program. In order to address the country's poverty, the Government of Eritrea (GOE) has embarked on an ambitious program of agricultural development. Such a program has enormous potential to help alleviate poverty and create income among the rural poor. However in seeking rapid agricultural development there is a possible danger of exacerbating the land degradation that is confronting the country. Some of the more important issues relating to sustainable land management are briefly described below.
7. Changes in landuse: One aspect of agricultural development has been an expansion of areas devoted to crop production, much of which was formerly used for grazing. The conversion of former

rangeland to irrigated and dryland cultivation poses a threat to pastoralism. In 1998 alone the area under cultivation expanded by almost 10%. Much of this expansion entails the clearing of woodland areas. One of the greatest threats to pastoralism is the loss to cultivation of 'rich-patch' areas – fertile areas that pastoralists have traditionally utilised when other grazing areas disappear. Loss of these areas contributes to increasing the total grazing pressure on the rangelands. The loss of tree vegetation and the clearing and cultivation of rich patch area also poses a threat to wildlife populations and species biodiversity.

8. Water use issues: Associated with land use changes and degradation processes is the rapid increase in the scope and intensity of water use. Available surface water and groundwater resources are increasingly being exploited in order to enhance the productive capacity of the land. Spate irrigation developments are expanding rapidly and are currently the focus of the Ministry of Agriculture (MOA) agricultural development strategy. Another form of irrigation involves the extraction of groundwater from wells or boreholes. Groundwater extraction rates that exceed the sustainable yield of the aquifer may cause aquifer levels to drop to the extent that groundwater is no longer available. Reduction in aquifer levels due to excessive extraction have been reported in the Alla and Tselima Plains.

9. The cumulative impacts of increased water extraction are not currently being taken into account. Construction of canals can lead to the destruction of riparian vegetation, posing a threat to these areas of important habitat and generally high biodiversity. Currently, surface water and groundwater extractions and their associated developments are treated as discrete developments with little consideration being made as to their cumulative impacts. Cumulative impacts can be both spatial (e.g. the spread of spate irrigation schemes and the cumulative loss of rangeland to cropping) and temporal (rate of extraction of groundwater may exceed the sustainable recharge yield of the aquifer being exploited). Other potential cumulative impacts issues include the maintenance of the 'riparian rights' of those further downstream from spate irrigation schemes to continue to have access to water and the issues and potential environmental conflict that may emerge if this access is not preserved. An additional potential risk that will require further monitoring and assessment is that of the potential of irrigation-induced salinity to emerge with the rapid expansion of irrigation schemes.

10. There has also been an increase in catchment soil erosion resulting from the failure of small to medium dams (locally termed 'microdams') in highland areas. These dams have been constructed to provide livestock and domestic water supply as well as irrigation for crop production. Sometimes these dams last only a few years following construction because they have filled with sediment due to upper catchment erosion. On other occasions dams have failed due to design faults such as inadequate spillway design. When this occurs, the failure of the dams themselves contributes to further soil erosion.

A.2 Project Objective

11. *The objective* of the GEF Project is to mitigate barriers in the Project area limiting the adoption of SLM practices through a systematic, community-based, catchment and landscape planning and management process which specifically targets the needs of the rural poor.

A.2.1 Rural Development and Poverty Reduction Objective

12. To contribute to eradicating poverty and enhancing livelihoods in the project area. This will be achieved by providing support to the GOE to implement the Livestock Rehabilitation and Development Programme (LRDP), co-funded by IFAD, OPEC, the GOE and the participating communities, of which this GEF project is a component part. The baseline, has the objective of providing for enhanced sustainable income generation by poor rural people in the programme area through a community-led, demand-driven approach to agricultural development. The GOE has indicated that its highest priority is in the area of livestock development with emphasis on income generation with the rural poor. It has further indicated that it prefers the LRDP to be implemented in four sub-Zobas in Gash Barka Zoba (Tesseney, Goluj, Upper Gash and Shambuqo) and in two sub-Zobas in Debub Zoba (Dbarwa and Sena'fe).

13. The LRDP incorporates community capacity building, community and household income generating investments, and a programme management component. This formulation for the LRDP is nearing completion. During formulation it became clear that, within a country like Eritrea which is suffering from serious land degradation and rapidly increasing pressures on natural resources, SLM strategies needed to be integrated within the Programme. In seeking to generate income for the rural poor through agricultural development, it is critical that the natural resources that are used as inputs into this system are utilised in a sustainable manner. If this is not done, income generation will be unsustainable as the natural resource base (soil, water, vegetation) declines.

14. Through a Technical Support Unit (TSU) The LRDP will be providing training, capacity building, and technical and financial support to facilitate the planning and implementation of agricultural development activities. The LRDP does not directly address the sustainable use of natural resources within its agricultural development programme. The sustainable use of natural resources within any agricultural development process requires not only that utilisation at the local scale is assessed, but that the cumulative impacts at the broader landscape and catchment scale are also taken into account. Some of these impacts will be both spatial and temporal. In addition, the inherent ability of the land and vegetation resources to sustain a particular level of use intensity ('land capability') must be taken into account; while the ability of the water resource to sustain a particular level of use must also be calculated. Likely livelihood impacts of changes to land uses and land use intensity should be part of the assessment process as well.

15. To effectively address these issues requires a land and water use planning system. Without a systematic planning process in place, the continuation of land and water use intensification poses several environmental, social and economic dangers for Eritrea. Land and water use planning allows for sustainable natural resource management and the urgent need for such a system was identified within the NAP (NAP 2002).

A.3 Project outcomes and outputs

16. The primary stakeholders are the community beneficiaries within the GEF project area. In particular, the GEF project activities, outcomes and outputs would target the needs of marginal groups such as poor rural households, female-headed households, and internally displaced people. The GEF project incorporates two primary strategies; a community capacity building strategy and a government capacity building strategy.

A.4 Project Strategy

Community capacity building strategy

17. The PDF-B investment would allow more detailed identification of appropriate full GEF project strategies, but at this early stage some suggestions can be made regarding how the GEF project would operate. The community capacity building strategy would operate at two integrated scales: at a village level, and at a catchment and landscape level.

18. **Village-level land water use planning for SLM** - Land and water use plans must be owned and understood by the communities who are to implement such plans; they must be *community-based* land and water use plans. In order for village communities to effectively participate within a community-based land and water use planning process, it is necessary that they are supported in developing the necessary skills, knowledge and perspectives. Thus a community-based planning process requires an initial orientation and capacity building process with the participating communities. This participatory planning process would be integrated with, and embedded within, the LRDP Community Driven Development (CDD) process. Utilising this capacity building process, community-based land and water use planning would be undertaken and overseen by Kebebi-level Land and Water Use Planning Committees, or similar existing Committees.

19. Importantly, community-based land use planning can be utilised as a process for community education, consensus building and forward planning. Where land use planning is underpinned by a robust and ongoing participatory planning process, it can provide a framework to help communities learn about the biophysical aspects of land use, as well as encourage them to reflect upon the longer term social, economic and political implications of land and water use decisions. Utilising trained Natural Resource Management Facilitators located within the TSU, the GEF project would provide the necessary tools and build the capacity of village communities to undertake participatory land and water use plans, to implement these plans, and to monitor and evaluate the progress of the plans. Where opportunities arise to integrate several village plans at the sub-regional level, an appropriately representative sub-regional Land and Water Use Planning Committee would be encouraged to form to undertake the integration process with TSU support.

20. Community based land use planning can be utilised as a very effective mechanism for community capacity building to achieve the following outcomes:

- Community education in SLM concepts and processes.
- Training in Participatory Monitoring and Evaluation of natural resource condition.
- Development of village-level Land and Water Use Plans; and, as a result of the planning process,
- Community identification and prioritisation of community and individual investment projects for SLM.

21. Community and household investment strategy: The land and water use planning process will allow the identification and prioritisation of community and household investments that will both contribute to sustainable natural resource management as well as generate household income. Funding would be provided within the GEF funded component for sustainable natural resource management investments at both the level of the community as well as at the level of the individual household. Communities and households would also be required to make cash or in-kind contributions in order to secure funding support.

22. Piloting and testing of new technologies or approaches to sustainable natural resource management. Innovation is often a high risk activity for resource poor communities and households. Innovative technologies may be unsuccessful, or require minor or significant adaptation to local conditions before they can be adopted by village communities. New soil and water conservation technologies, new forage varieties, conservation farming and agroforestry technologies might also require local testing and demonstration. The GEF component would fund such piloting and testing of new technologies.

23. **Catchment and Landscape Planning, and Management** - Community-based land and water use participatory planning processes at the village level have the potential to deliver a number of SLM and livelihood benefits - including engendering local ownership of plans and building local capacity to implement the plan outcomes. However, on their own such processes have some limitations. Local planning processes may be limited in the extent to which they can incorporate cumulative impacts and offsite impacts and issues at the broader catchment or landscape scale. For example, within the Eritrean Central Highlands upper catchment erosion is a common cause of siltation of dams further down the catchment, limiting their effectiveness and longevity. In the Central Highlands some dams have been rendered ineffective within a few years after construction due to siltation and poor construction techniques. A catchment planning approach can identify such broader scale land degradation processes and address them. Similarly the management of particular vegetation communities and biodiversity and wildlife issues may require broader scale planning in order to identify and address such issues.

24. Village-level plans may also be limited in the extent to which they can identify and utilise broader scale natural resource management opportunities. For example, cooperative natural resource management arrangements between villages at the sub-regional level may deliver benefits in the areas of grazing

management and rangeland reservation, water development initiatives, forage development and management, and wildlife and biodiversity conservation, amongst others.

25. In order to address these broader scale issues and process it is proposed that the GEF project incorporate a Catchment and Landscape Management (CLM) component. Catchment and landscape planning and management allows incorporation of hydrological processes as well as addressing issues which may transcend catchment boundaries such those related to vegetation communities, wildlife and biodiversity, and pastoralist transhumance.

26. The CLM component would provide training and technical and facilitation support in catchment and landscape planning for communities at village and sub-regional levels. In building community capacity, the CLM would facilitate the formation of horizontal linkages and networks between villages, and vertical linkages and networks between village-level planning and sub-regional level planning.

27. Broader scale catchment and landscape planning would be facilitated by specialist Catchment Planning Facilitators. The Catchment Planning Facilitators would undertake broader surveys of catchment and landscape issues and work with the Natural Resource Management Facilitators and the participating communities to coordinate planning between different kebabis. They would also work with communities to make them aware of broader catchment and landscape scale issues and support them in addressing these issues within their local kebabis plans. Catchment Planning Facilitators would also be located within the LRDP Technical Support Unit and would gain technical support from specialist officers within the Ministry of Agriculture and the Ministry of Land, Water and Environment.

Government capacity building strategy

28. The GEF Project would invest in building the capacity of government staff and institutions to initiate, implement, manage, monitor and evaluate land and water use planning at the local and regional scales. The Catchment and Landscape Management activity would provide training and technical and facilitation support for the TSU and government technical staff in the area of catchment and landscape planning concepts, processes and technologies. In order that the CLM project activities continue beyond LRDP completion, it is recommended that a Catchment Planning Unit be formed within either the Ministry of Agriculture or the Ministry of Land Water and Environment from Year 2 of the Project onwards. Responsibilities for this activity would be progressively devolved to the Unit during the second half of the project. The GEF increment would provide policy and procedural support in relation to sustainable natural resource management within the following strategic areas.

Policy and procedural support

29. Support for the development of policy, institutions and procedures would be provided in the following areas.

Environmental risk assessments of new developments.

30. The GEF project would support the development of policies, protocols and institutions that would ensure that new developments undergo an appropriate level of environmental risk assessment during both the design and approval stages. The GEF Project would support the following initiatives:

- Development of procedures to ensure the application of the Eritrean National Environmental Assessment Guidelines to new investments, including the necessary training of government staff.
- Development of structures and processes for regional and national planning frameworks to include assessments of cumulative impacts of new developments.

Further development of policy and institutional frameworks

31. There is a need to further develop policy and institutional frameworks to support land and water planning processes. The GEF Project would support the development of policies in relation to a national

catchment management strategy and the development of a national water strategy. The development of further land and water use policy coordination between the Ministry of Agriculture and the Ministry of Land Water and Environment would also be supported. Activities that could be funded in this area are national and international technical assistance to support policy dialogue, analysis and formulation, and national, regional and international study tours.

Identification and demonstration of innovative approaches to SLM

32. The GEF project will pilot, test and demonstrate innovative approaches to SLM, land and vegetation rehabilitation, water conservation, and biodiversity conservation in agricultural and rangeland areas.

Identification of environmental conflicts and strategies for their resolution

33. Increased competition over land, vegetation and water resources, combined with rapid land use changes suggests that environmental conflicts are likely to be currently occurring and are likely to increase in the future. Anecdotal evidence supports this analysis (e.g. see Negassi et al, 2002). The community-based land and water use planning process needs to acknowledge and understand the types of conflicts that are already in existence as well as understand what types of conflicts are likely in the future. Thus there is a strong need early in the project lifetime to identify the types of land and water use and environmental disputes that are evident within the project area; and the types of disputes that are likely to emerge in the future.

Capacity building in conflict analysis and environmental dispute resolution

34. In a nation where there is increasing conflict over land and water resources and where there are rapidly occurring changes to land and water use, there is a need to build the environmental dispute resolution capacity of both government officers and participating communities. Thus the GEF project would provide training to government officers and participating communities in environmental conflict analysis and environmental dispute resolution techniques, particularly environmental mediation.

Identification of Lessons Learnt and Institutionalisation of SLM Processes

35. An important outcome of the GEF financed project will be identification of lessons learnt and the continuation of project activities beyond the GEF financing period. Lessons learnt will include those relating to:

- SLM technologies and investments
- Village, catchment and landscape SLM planning processes
- SLM capacity building needs and strategies
- SLM enabling policies, processes and institutions
- Effective community and household investments in SLM
- Community consensus building and environmental dispute resolution.

The incremental outcomes of the GEF project would be the following:

36. Community level

- Develop the capacity of village communities (particularly targeting the needs of disadvantaged groups such as poorer households, female-headed households and internally displaced people) to undertake community-based land and water use plans at the village level whereby communities are encouraged to identify the cumulative and offsite impacts of developments.
- In doing so, undertake community education in sustainable natural resource management concepts and processes; and community training in Participatory Monitoring and Evaluation of natural resource condition.

- Where village communities employ traditional land use planning strategies, these traditional strategies would be acknowledged and incorporated within any new land use planning system.
- Support community identification and prioritisation of community and individual investment projects for sustainable natural resource management.
- Facilitate the broader scale integration of land use plans between village communities to mitigate constraints and optimise opportunities that operate beyond the village scale.
- Use the community-based land use planning experience as a demonstration and piloting opportunity for other interventions.
- Identification and mitigation of potential land use and water use conflicts.
- Identify, facilitate, and support the testing of innovative land tenure arrangements that preserve both the social and economic equity of traditional systems, as well as allow and encourage longer term investments by individual households in land, water, and vegetation resources.
- Co-finance community and individual investments in sustainable natural resource management.
- Identify and promote alternative livelihood strategies that are environmentally friendly to demonstrate pilot activities which contribute to SLM.

37. **Catchment and Landscape Level**

- Identify important catchment or landscape level issues and processes and facilitate the integration of these issues and processes into the village-level land use planning process.
- Provide training, and technical and facilitation support in catchment and landscape planning for communities at village and sub-regional levels. In building community capacity, the GEF project would facilitate the formation of horizontal linkages and networks between villages, and vertical linkages and networks between village-level planning and catchment or landscape level planning.

38. **Government Support**

- Identify policy and institutional issues and facilitate policy discourse at both the National and Regional levels.
- Strengthen cross-sectoral coordination between all concerned stakeholders, at local, regional and national levels.
- Address the NAP priorities elaborated under the CCD framework and mainstream the NAP concerns and SLM in national, regional and local policies and in related sector frameworks.
- Support the replication and implementation of successful experiences and lessons learned for SLM practices through existing strategies and programs.

GEF Outputs

- Produces satellite imagery suitable for use as base maps for village and sub-regional land and water use plans.
- Records within a Geographical Information System the Village Land and Water Use Plans, the sub-regional Land and Water Use Plans, and the catchment and landscape management plans.
- Produces village, sub-regional, and catchment and landscape plan outputs in both map form and descriptive form.
- Identifies improved land tenure approaches which encourage community and household investment in SLM.
- Produces appropriate policy and institutional frameworks to support SLM.

B. COUNTRY OWNERSHIP

B.1 Country eligibility

39. Eritrea signed the United Nations Convention to Combat Desertification (UNCCD) in 1994 and ratified it in 1996. In accordance with Articles 9 and 10 of the Convention, in 2001 the Government of Eritrea (GOE) prepared a National Action Program to Combat Desertification and to Mitigate the Effects of Drought (NAP 2002).

40. Eritrea acceded to the Convention on International Trade in Endangered Species of Wild Fauna & Flora (CITES) on 22 January 1995 and ratified the Convention on Biological Diversity (CBD) in 21 March 1996.

B.2 Country drivenness

41. The proposed GEF funded activities are consistent with Eritrea's national policies and strategies as outlined below.

National Policies and Strategies

42. The National Environmental Management Plan for Eritrea (NEMP-E) which was developed in 1995 and presented as a 10-15 year plan, recommends three strategies: repairing of harmful practices; implementing the steps needed for a sustainable and rational use of natural resources; and the protection and permanent conservation of certain habitats for Eritrea's indigenous flora and fauna and for historical heritage. Planned activities included arresting land degradation, increasing soil cover, empowering people to improve farming methods and land husbandry, preparation of a national action plan to combat desertification, and encouraging indigenous grasses and browse plants.

43. In 1999 The Department of Environment within Ministry of Land Water and Environment (MLWE) completed a Biodiversity Stocktaking Assessment Report (BSAR) and in 2000 developed a National Biodiversity Strategy and Action Plan (NBSAP). In preparing that assessment, efforts were made to collect, review, and compile biodiversity information at the ecosystem, species, and genetic levels. The checklists that were prepared as part of that assessment can provide a starting point for any study of the status of Eritrea's biodiversity or of its biological resources, for designing programmes of action in conservation and the sustainable use of natural resources, as well as for the rehabilitation of degraded land.

44. In accordance with Articles 9 and 10 of the UNCCD, in 2001 Eritrea prepared a National Action Program to Combat Desertification and to Mitigate the Effects of Drought (NAP 2002). The NAP is divided into four parts. Part A provides an overview of land degradation in Eritrea and gives the national vision and philosophy. Part B provides a comprehensive list of factors contributing to land degradation including socio-economic causality. Part C includes the Action Plan of practical measures and policy frameworks designed to address land degradation including projects and programs. Part D presents the Implementation Plan which describes the financial, institutional and human resources required to implement the NAP.

45. The NAP identified the need to introduce community land use planning in pilot areas, to assist farmers for in situ conservation of indigenous crops and landraces, to establish gazetted protected areas and seasonal and permanent livestock enclosures and conservation activities, to develop agro-forestry technologies, to strengthen traditional coping mechanisms and the capacity of local communities to combat desertification, to establish of local land degradation Committees and undertake community awareness raising campaigns (NAP 2002).

46. Eritrea has been active in recognising and responding to the rapid and severe land degradation which it is suffering. The NAP identified the primary land degradation processes, causes and posed a number of potential solutions. These solutions were incorporated into 23 project outlines which, with the support

of funding from the Global Mechanism have now been further refined and consolidated into 20 priority projects. The proposed GEF-funded CLM Project implements several key components identified within the NAP and in fact incorporates substantial elements of three of the NAP priority projects viz:

- *Application of Land Tenure System and Introduction of Community Land Use Planning in Pilot Areas*
- *Natural Forest and Woodland Conservation and Management*
- *Reviewing and Revising Existing Customary (Traditional) Law on the Management of Communal Grazing Lands.*

47. The NAP National Forum on Land Degradation is the principal platform for discussing policy issues on land degradation. The National Forum brings together stakeholders concerned with land degradation from all levels. The National Forum will be held every 3 years and will: review and evaluate progress being made in addressing land degradation at all levels; recommend policy changes where these are deemed necessary; and focus national attention on land degradation and thereby increase national awareness and commitment to address land degradation more effectively.

48. Eritrea has been implementing the Millennium Development Goals (MDG) since 2003. The MDG goals have been aligned to the draft Interim-Poverty Reduction Strategy (IPRS) and the National Food Security Strategy (NFSS) prepared recently and awaiting Government endorsement.

49. The pre-existing policy, and associated legislation, is known as the Forest & Wildlife Conservation & Development Act (No. 192/1980), was inherited from the colonial administration of the time. A new Forestry and Wildlife Act has been proposed but is still in draft form.

50. The GOE has made two national Proclamations which are intended to provide the necessary legal basis for the implementation of the NAP recommendations. The first is the Land Reform Proclamation (No. 58/1994) which is intended to provide: a basis for security of land tenure that in turn provides an incentive for better land husbandry and for increased long-term investment in land improvement; an equitable and fair distribution of land resources amongst men and women; and improved access to land for those groups which had been traditionally denied such access.

51. The second is the Proclamation for the Establishment of Regional Administrations (No. 86/1996) which is intended to provide: an empowering framework for action at the Zoba, sub-zoba, and Village/Area levels; a clear mandate to local-level officials – especially Zoba, sub-zoba, and Village/Area Administrators – to take action in protecting and preserving land resources; and a framework for the evolution of grassroots action against land degradation. However, the provisions of Land Reform Proclamation have yet to be effectively implemented due to a number of complex constraints. One such constraint is that the Proclamation provides only a general framework, and further work is needed in drawing up the necessary policies, rules, regulations, and guidelines of implementation. In addition, processes and mechanisms for moving from the traditional tenure system to any new system have yet to be identified. Innovative land tenure arrangements are now required that preserve both the social and economic equity of traditional systems, as well as allow and encourage longer term investments by individual households in land, water, and vegetation resources.

52. The institutions necessary for the implementation of the Land Reform Proclamation (No. 86/1994) are in their infancy. Responsibility mainly lies with the MLWE Department of Land. Currently this Department is focused mainly on building its human and institutional capacities. Substantial effort will be required to upgrade the institutional capacity to take on these complex tasks. The fact that the MOA is the agency responsible for the much of the agricultural development associated with the exploitation of land and water resources means that considerable coordination between the MOA and the MLWE will be required within both policy and executive functions.

53. The Eritrean National Desertification Fund (ENDF) has been initiated. The ENDF is the principal mechanism which to be used ‘to channel financial resources rapidly and efficiently to the local level’

(Article 21.1.d). ENDF is the primary financial mechanism for supporting community-level anti-desertification and drought-mitigation activities. The ENDF has a Board composed of representatives from Ministry of Agriculture, Ministry of Local Government, and from each of the six Regional legislatures. The ENDF may receive funds from the GOE National Treasury or from external sources.

C. PROGRAM AND POLICY CONFORMITY

C.1 Program Designation and conformity

54. This GEF project proposal entitled “Catchment and Landscape Management” (CLM) aims to address the causes and mitigate the effects of land degradation on rural livelihoods and maintain ecosystem structure and function. The project will undertake community-based sustainable land management interventions, and support institutional strengthening at the local, regional and national levels. The project mainstreams SLM strategies into local and regional development processes, while at the national level supporting policy development and enabling processes.

55. The project conforms closely to GEF’s Operational Strategy, the objectives and eligible activities under OP15 Sustainable Land Management, and the strategic priorities of Targeted Capacity Building (SLM 1) and Implementation of Innovative and Indigenous Sustainable Land Management Practices (SLM2) as well as providing linkages to Mainstreaming Biodiversity within Production Landscapes and Sectors (BD-2) and Generation and Dissemination of Best Practices for Addressing Current and Emerging Biodiversity Issues (BD-4).

56. The Project contributes to biodiversity conservation through protecting ecosystem integrity and function, and mitigating climate change through promotion of increased tree and vegetative cover. The project specifically links with the strategic priority of Mainstreaming Biodiversity in Production Landscapes and Sectors (BD2) as it puts significant emphasis on fostering broad based integration of biodiversity conservation within community-based land and water use plans and catchment and landscape planning processes.

57. Through its integration of both local community-based land and water use plans with catchment and landscape scale planning processes, the project will pilot and demonstrate biodiversity conservation strategies across a range of scales. As a result of this experience, the project will provide an opportunity to distil, test, and disseminate best practices in biodiversity conservation. Thus the project will also closely link to the strategic priority of Generation and Dissemination of Best Practices for Addressing Current and Emerging Biodiversity Issues (BD4).

58. The GEF project will complement and integrate with the "Livestock Rehabilitation and Development Programme" (LRDP) through shared baseline studies, integrated implementation arrangements, and convergent approaches to community participation. These links, and other areas of cooperation, will be further elaborated during the PDF-B design process. Essentially the GEF component will implement the sustainable natural resource management component of the full project

C.2 Project design

C.2.1 Problem Definition

59. Eritrea is one of the poorest countries in the world with per capita income estimated at USD 150 in 2003. Its HDI ranking is 155th out of the 175 countries assessed. Around 69% of the population of 4.4 million live in rural areas, although agriculture has a share of only 14% of GDP.

60. Around 65% of the rural population is poor, 39% live in extreme poverty and life expectancy at birth barely exceeds 50 years. The poor have been significantly affected by the recent war and drought years. Many have been displaced and lost their few assets including livestock, and are now struggling to re-establish a food secure livelihood. Rainfed agriculture is the predominant activity for more than half the population, but since independence in 1991, Eritrea has not been able to produce much more than half

of its annual food grain requirements even in good rainfall years. The country depends on food aid for a higher proportion of its needs than any other country. However, Eritrea's poor natural resource base limits the effectiveness of poverty reduction efforts. The situation is exacerbated by the degraded nature of the landscape with severely eroded and depleted soils, near complete loss of forest cover, high rates of surface runoff, and high siltation rates in water conservation structures. Loss of biological diversity has closely followed land degradation processes.

61. The proposed GEF Project has national, regional and local components within Eritrea. At the regional and local scales the project would target two Zobas (provinces). Within Zoba Gash-Barka located within western lowlands of the country, four sub-zobas will be targeted (sub-Zobas Tesseney, Goluj, Leylay Gash and Shambuqo). Within Zoba Debub, within the central highlands, two sub-zobas will be targeted (sub-Zobas Dbarwa and Sena'fe). These areas were chosen as they coincide with the sites of the IFAD-financed LRDP intervention with which the GEF project would integrate. It is intended that the approaches developed during the life of the project would be applicable to other Zobas and sub-Zobas within the country. As with much of Eritrea, both these Zobas have experienced relatively recent and rapid land degradation.

Key Environmental and Natural Resource Issues

62. A wide range of natural resource and environmental issues are currently confronting the people of Eritrea. The more important of these are outlined below.

63. **Land Degradation Issues:** A number of studies have identified the following key environmental issues: tree loss due to clearing of trees for cropping and fuelwood, and grazing pressure; extensive and severe soil erosion due to overgrazing and inappropriate cultivation; substantial soil nutrient depletion, particularly in cropping lands, due to lack of inputs, crop residue removal, and the increasing and competing use of animal dung as a domestic fuel source; biodiversity loss due to above influences. The net result has been a loss of rangeland and cropland productivity, species diversity, and an resultant increase in the poverty and vulnerability of the poor. Important land degradation issues are outlined below.

64. **Forest issues:** There are three major forest/woodland types in Eritrea: highland forests, Acacia woodlands and Riverine forests. According to the National Action Plan to Combat Desertification and Mitigate the Effects of Drought (NAP 2002), originally the highland forests of *Juniperus procera* and *Olea africana* extended over much of the plateau, but have been largely destroyed or degraded; only remnants now survive. On the lowlands and lower escarpments, Acacia woodlands occupy about a quarter of the surface of the country. Riparian vegetation along the river systems of the Gash/Mereb, Setit and Barka in the lowlands, provides important habitat and has considerable biodiversity conservation value. Doum palm (*Hyphaene thebaica*) is an important constituent. These forests are under threat as they occupy fertile, well-watered and level sites suited to development for commercial agriculture. Spate irrigation schemes are increasingly being implemented in these areas. The highland forest constitutes 0.8% of the total natural vegetation of the country. Forest and woodlands, including riverine forest and mangroves cover 13.7% of the total area. Shrubland is the dominant vegetation in Eritrea covering at 63.8% of the total area of vegetation. The riverine forests and mangroves play important ecological and economic roles for rural communities, and occupy 1.5% and less than 0.1%, respectively. Threats to forests include clearing for crop production, taking of trees for fuelwood and overgrazing.

65. **Human population increases and land pressures:** Reliable population numbers are not currently available for Eritrea. The NAP assumes a national annual population growth rate of 2.9%. If this is correct, the estimated area of arable land per capita has decreased from 1.33ha/person in 1900 to 0.10ha/person in 2005.

66. **Rangeland Issues:** Pastoral populations are increasing, but not as rapidly as agricultural populations. The rate of population growth in pastoral areas is estimated to be in the range of 1%-

2%/year. However, the lower pressure from human population increases is offset by an increase in the herd population owing to improved veterinary and water-supply conditions. The off-take rates have not kept pace with the increasing in herd sizes. This has placed greater pressures on grazing lands.

67. **Livestock population increases:** between 1905 and 1946 the number of cattle increased by 300% while the number of goats and sheep rose by over 200% (NAP 2002). This has led to overgrazing and progressive deforestation of the highland forests particularly in the Central Highlands Zone. In these areas, since livestock are grazed on communal lands with no user fees, each household may attempt to increase the size of its livestock, thus increasing grazing pressure.

68. **Soil erosion:** Eritrea has a strong history of implementation of soil and water conservation structures. Soil and rock bunds, check dams and bench terracing have all been extensively utilised in many parts of the country. However these measures alone are insufficient to address the increasing rate of soil erosion due to increasing land use intensity and the utilisation of land beyond its inherent capability. The gross rate of soil loss from croplands, rangelands and barren land is estimated at respectively 21, 2.5 and 35 tonnes/ha/year. Crop yields are declining at the rate of around 0.5%/year owing to soil erosion (NAP 2002). Additional measures such as sound land use planning, conservation farming, sustainable grazing management, forest management and rangeland and cropland rehabilitation are required to arrest these rates of soil erosion. Severely eroded soils may remain out of production for many years even if reserved from grazing. To return these areas to their original productive potential may require substantial investments in soil conservation works, fertiliser and reseeded. For example, areas affected by severe gully erosion may require investments of several hundred dollars per hectare to return it to them to their productive potential.

Land Use and Water Use Changes

69. **Changes in landuse:** The conversion of former rangeland to irrigated and dryland cultivation poses a severe threat to pastoralism. In 1998 alone the area under cultivation expanded by almost 10%. Much of this expansion entails the clearing of woodland areas. Often cultivation is given priority over pastoralism. One of the greatest threats to pastoralism is the loss to cultivation of 'rich-patch' areas – fertile areas that pastoralists have traditionally utilised when other grazing areas disappear. The loss of tree vegetation and the clearing and cultivation of rich patch area also poses a threat to wildlife populations and species biodiversity.

70. **Water use issues:** Associated with land use changes and degradation processes is the *rapid* increase in the scope and intensity of water use. Available surface water and groundwater resources are increasingly being exploited in order to enhance the productive capacity of the land. Irrigation is traditionally practiced in the floodplains of western and eastern Eritrea by constructing diversion channels to direct sporadic 'spate flows' from the beds of seasonal streams onto adjacent farmland. Spate irrigation developments are expanding rapidly and are currently the focus of the Ministry of Agriculture (MOA) agricultural development strategy. The other type of irrigation utilized involved the extraction of groundwater from wells or boreholes. Groundwater extraction rates that exceed the sustainable yield of the aquifer may cause aquifer levels to drop to the extent that groundwater is no longer available. Reduction in aquifer levels due to excessive extraction have been reported in the Alla and Tselima Plains.

71. The cumulative impacts of increased water extraction are not currently being taken into account. Construction of canals can lead to the destruction of riparian vegetation, posing a threat to these areas of important habitat and generally high biodiversity. Currently surface water and groundwater extractions and their associated developments are treated as discrete developments with little consideration being made as to their cumulative impacts. Cumulative impacts can be both spatial (e.g. the spread of spate irrigation schemes and the cumulative loss of rangeland to cropping) and temporal (rate of extraction of groundwater may exceed the sustainable recharge yield of the aquifer being exploited). Other potential cumulative impacts issues include the maintenance of the 'riparian rights' of those further downstream from spate irrigation schemes to continue to have access to water and the issues and potential

environmental conflict that may emerge if this access is not preserved. An additional potential risk that will require further monitoring and assessment is that of the potential of irrigation-induced salinity to emerge with the rapid expansion of irrigation schemes.

Biodiversity Issues

72. **Loss of wildlife and Biodiversity:** Increases in land use intensity and resulting land degradation processes and also pose substantial threats to wildlife populations and biodiversity. Previously Eritrea exhibited a wide range of wildlife, including elephant (*Loxodonta africana*), buffalo (*Syncerus caffer*), giraffe (*Giraffa camelopardalis*), lion (*Panthera leo*), leopard (*Panthera pardus*), roan antelope (*Hippotragus equinus*), greater kudu (*Tragelaphus strepsiceros*), warthog (*Phacochoerus aethiopicus*), wild ass (*Equus africanus*) nubian ibex (*Capra ibex nubiana*), dorcas gazelle (*Gazella dorcas*), soemmerring's gazelle (*Gazella soemmerringii*), ostrich (*Struthio camelus*), and cheetah (*Acinonyx jubatus*). Today, the species richness of wildlife is considerably depleted owing to the decades of the War of Liberation of 1961-1991, persistent drought, and neglect. There are no recent records of buffalo, cheetah, giraffe, roan antelope, or lion - although a remnant population of elephant is still to be found in the south west of the country.

73. **Invasive Weeds:** A number of introduced invasive perennial weeds appear to be spreading in Eritrea. The NAP (2002) identified important species as prickly-pear cactus (*Opuntia ficus-indica*), white tobacco (*Nicotiana glauca*), and one or more species of mesquite (*Prosopis chilensis* and *P. juliflora*). These weed species have demonstrated an enormous ability to spread into the natural habitats of Eritrea and suppress indigenous species. To date, little action has been taken to study or control the spread of these three alien plant species. Although, especially prickly-pear cactus (*Opuntia ficus-indica*) and mesquite (*Prosopis chilensis*) have economic importance to local communities (as sources of both food and fodder), they are a potential threat to Eritrea's native biodiversity.

74. **Land tenure issues:** Traditional tenure patterns, particularly Diessa (Village ownership) and Resti (kinship ownership), provide for rotations of land ownership every five to seven years. The intention of traditional land redistribution is to allocate community members equal shares (taking both area and fertility into account) sometimes using a process involving drawing of lots. Both these systems have prevented landlessness and thus were economically and socially valuable in the context of subsistence agriculture. However these traditional systems have not been conducive to good land husbandry. The positive aspect of traditional tenure has been undermined by population pressures. Both the Diessa and Resti ownership patterns have generated fragmentation of holdings and the seven year period is too short to provide people with the incentive to make investments in improving the land eg. tree planting, digging wells, and the implementation of Soil and Water Conservation structures. Also such land cannot be easily used as security for credit.

75. There has also been a recent rapid expansion of the granting of concessional licenses for mechanised commercial farming. In 1998 alone almost 44,000ha of concessions were granted (NAP 2002).

76. Impacts upon traditional livelihood strategies: Forces of change such as the generally increasing human and animal populations and the resulting land degradation, loss of rangeland to cultivation, loss of biodiversity, increased use of water resources, deforestation and proposed land tenure changes will have dramatic impacts upon traditional livelihood strategies among pastoralist, agro-pastoralist and agricultural communities. There is a pressing need for an assessment of the impacts of the above forces of change on traditional livelihood strategies of communities. There is also an urgent need for community development processes to aid communities in identifying a range of possible adaptive mechanisms from which they can progressively choose.

C.2.2 Current baseline scenario without GEF intervention

77. The GEF Project investment will add an urgently needed SLM increment to the proposed Livestock Rehabilitation and Development Programme (LRDP) which is to be jointly financed by IFAD, the Government of Eritrea, OPEC and the participating beneficiaries or clients.

The LRDP goal and objective:

78. The LRDP essentially entails investments in community driven agricultural development particularly targeting the rural poor. The LRDP seeks to contribute to the achievement of the Millennium Development Goals (MDG). The LRDP goal and objective are:

Programme goal: *to contribute to eradicating poverty in the programme area.*

Programme objective: *to provide for enhanced sustainable income generation by poor rural people in the programme area through a community-led, demand-driven approach to integrated productive investment, supported by capacity building for communities and implementation agencies.*

Outline Description of baseline LRDP Components

79. The LRDP would aim to provide for investment by communities in their own capacity and in facilities that would enable improved production of livestock and crops. The LRDP incorporates two agricultural development investment components; one targeted at the community level, and the other at the individual household level, which would allow for communities and individuals to invest in productive agricultural activities to enhance their livelihoods. LRDP grant funding will be allocated to communities and individuals for these productive agricultural investments. Access to grants will require a financial co-contribution from the beneficiaries.

80. The LRDP would support investments which provided for profitable production of crops, fodder and livestock, as well as complementary rural enterprises linked to this production. Creation of new rural employment opportunities would be an important outcome of these investments.

Gaps in the baseline – Risks of land degradation and overexploitation of water resources

81. The baseline scenario has a number of serious gaps which collectively will contribute to increased land degradation over time if they are not addressed. As agricultural development rapidly proceeds in order to provide livelihoods for the rural poor, it is likely that without appropriate SLM mechanisms in place, land and water degradation and biodiversity loss will accelerate.

82. Land use in Eritrea is intensifying rapidly through increased grazing pressure on existing rangeland and the progressive conversion of rangeland to both rain fed and irrigated cropping. Available surface water and groundwater resources are increasingly being exploited in order to enhance the productive capacity of the land. The LRDP focus is on increasing the incomes of the rural poor through productive investments in community capacity building and the more productive utilization of land and water resources. This intervention closely parallels the current direction of government agricultural and poverty reduction policy. However there are also some clear gaps in this strategy which, if left unaddressed, pose some serious dangers for the baseline intervention.

83. **Lack of effective land and water use planning at local, regional, or national levels.** Currently there is a lack of an effective land and water use planning process at the village, regional or national levels. The technical capacity of the various levels of government to undertake a systematic and integrated land and water use planning process is still very limited. However with the increasing decentralisation of government administration to the Zoba (regional) and sub-Zoba (sub-regional) levels, an administrative framework is developing that could support decentralised land and water use planning processes if institutional capacity was further developed.

84. Threats of land and water degradation and biodiversity loss, and impacts upon human livelihoods: Without a systematic land use and water use planning process in place, the continuation of land and water use intensification poses several dangers for Eritrea. Land may be used beyond its inherent capability, the cumulative impacts of conversion of rangeland to cropland are not taken into account, the cumulative impacts of land use change on biodiversity are not ascertained or mitigated, and groundwater and surface water resources may be exploited beyond their sustainable yield. Changes in land use, and degradation of land or water resources, may also have important livelihood impacts for agricultural and pastoral communities. Effective land use planning processes must take into account social and economic impacts as well as those of a biophysical nature.

85. The need to implement the NAP recommendations: The critical need for systematic land use planning was highlighted within the NAP which made the following recommendations (NAP 2001 pp. 17). 1. An integrated national land-use policy is required which integrates the various sectoral policies based upon the principles of efficiency, equity, and environmental soundness. 2. A systematic and user-oriented assessment of the land resources of Eritrea should be a priority. 3. Guidelines, directives, and standards for implementing the new land-tenure system and the introduction of land-use planning are required. 4. Strengthening the institutional and professional capacities of land use are needed. 5. Land-use planning should precede every development activity on land.

86. Need for improved policy and executive coordination between key government agencies: The MOA is responsible for agricultural development (including the utilisation of water resources for agricultural production) and rangeland management, while the MLWE is responsible for sustainable management of the natural resource base. Clearly agricultural development will not be sustainable in the longer term if the natural resource base is not also utilised in a sustainable manner. With the current pursuit of poverty alleviation it appears that agricultural development is proceeding without sufficient consideration being given to sustainable natural resource management. Thus there is strong need for closer coordination of policy development and executive function between the two Ministries. Secondly there is a need to develop an integrated approach to natural resource management in terms of policy development, planning processes and activities. To neglect to do so is to fail to recognise and respond to the interconnectedness of natural resources and their influence upon ecosystem structure and function.

87. Lack of natural resource assessment information: Within Eritrea there is a lack of information relating to the natural resource inventory and condition assessment. The lack of information regarding land, vegetation and water resources renders land and water use planning at any broader scale extremely difficult.

88. Barriers to private investment in land rehabilitation and land and water conservation measures: There are two clear barriers to private investment in land rehabilitation and land and water conservation measures. The first of these is the traditional land tenure arrangements that discourage longer term investments by individual households in land, water, and vegetation resources. The second is that some conservation measures, particularly in the area of soil and water conservation, have been initiated and funded by government with little or no private contribution from the beneficiaries. This approach has resulted in a lack of clarity regarding the ownership and responsibility for the ongoing maintenance and operation of such structures.

89. Without the GEF project increment agricultural development will proceed within the project area without a systematic evaluation of the impacts of unplanned agricultural development upon the sustainability of the natural resource base, biodiversity conservation, and human livelihoods. This will be of increasing concern as land and water use intensification proceeds. The fact that Eritrean communities are extremely impoverished and vulnerable, and that land degradation and biodiversity loss are already rapidly accelerating, makes this GEF project increment even more urgent.

C.2.3 Alternative scenario with GEF intervention – incremental reasoning

90. The GEF intervention will address sustainable natural resource management issues that would be largely unaddressed within the baseline scenario. The LRDP seeks poverty alleviation through agricultural development. However the project in its baseline form does not have the capacity to address the sustainable natural resource management implications of such developments. Left unaddressed, this gap will contribute to further erosion of the natural resource base, limit the efficacy of the development investments, and pose serious threats to the longer term livelihoods of the intended beneficiaries.

91. A range of constraints (outlined above) limit the adoption of sustainable land management strategies by both government and participating communities. Some of these barriers also impede the generation of global benefits within the context of sustainable development, such as those related to increased conservation and protection of biodiversity, and increased carbon sequestration.

92. In order to address these barriers the GOE requested IFAD's assistance in the preparation of a GEF-financed project to complement and address the gaps in the LRDP.

93. Under the GEF-financed alternative scenario, GEF activities would be integrated with the baseline intervention to demonstrate how agricultural development and sustainable natural resource management can be simultaneously achieved within a single intervention framework. Directly targeting sustainable natural resource management, the GEF project would intervene in the same geographical area as the LRDP, and GEF-financed staff would be located in the same project unit as the LRDP staff.

94. The GEF initiative will undertake the sustainable natural resource management component of the broader LRDP project. It is proposed that GEF funding be used to develop a land and water use planning component. This GEF component would be termed Catchment and Landscape Management (CLM) and would incorporate both planning processes and appropriate management and sustainable technologies, and community and government capacity building, and would closely integrate within the broader LRDP. In order to be effective, land and water use planning must be undertaken at a several scales, with progressive integration of each level of plan. The GEF project component would identify and support processes, issues, technologies, policies and institutions to allow:

- Land and Water Use Plans at the individual village ('Kebabi') level.
- Land and Water Use Plans involving groups of villages, or sub-catchment level.
- Broader scale catchment and landscape plans.
- National planning initiatives such as the development of a national water strategy.
- The identification of, and community and household investment in, appropriate SLM technologies.

95. Through community capacity building and government capacity building, and a systematic community-based approach to land and water use planning and management, the GEF project ('Catchment and Landscape Management') increment will address the following issues or gaps in the baseline situation.

- Identify appropriate land uses based upon land capability and level of land degradation (e.g. identify areas appropriate for cropland, rangeland, forestland, rehabilitation areas, and biodiversity conservation).
- Build the capacity of the rural poor and marginal groups such as female-headed households and internally displaced people, to participate in and undertake land and water use planning; and to identify and implement SLM technologies in order to improve their livelihoods.
- Identify biodiversity conservation issues, threats and strategies and incorporate these into the SLM planning process.
- Identify and address the cumulative impacts of land and water use change or intensification.

- Identify improved land tenure systems to encourage the adoption of SLM and pilot the development of these systems within the project areas.
- Identify and address gaps in the policy, institutional and coordination framework which provide barriers to the adoption of SLM.
- Identify and encourage the adoption of appropriate SLM technologies.

96. A detailed identification of the complementarities between the GEF component and the IFAD LRDP would be undertaken with the PDF-B phase of the GEF project. A preliminary assessment of the baseline and incremental outcomes are listed below in Table 1.

Table 1: Baseline Outcomes and GEF Increment Outcomes

Baseline Outcomes	GEF Increment Outcomes	GEF SPs
1. Community Capacity Building development		
<ul style="list-style-type: none"> • Community capacity building to develop effective channels of consultation involving various interest groups through in participatory process • Trained skilled and experienced community-representative institutions. • Develop community skills in participatory monitoring and evaluation to allow communities to identify indicators of implementation process, outputs and outcomes, and determine how these can be measured. • Build community skills in identifying productive investment opportunities. 	<ul style="list-style-type: none"> • Development of specific community capacity in natural resource assessment and land use and water use planning. • Support for the formation and strengthening of umbrella institutions that can effect land use planning beyond the village scale. • Develop community skills in SLM participatory monitoring and evaluation to assess land and vegetation condition. • Build community skills in identifying, building consensus upon, and prioritising SLM investments at the local, catchment and landscape scales. • Capacity building in assessing the cumulative and offsite SLM impacts (both spatial and temporal) of developments. • Community capacity for conflict resolution in SLM. 	SLM-1
2. Government capacity building		
<ul style="list-style-type: none"> • Process skills development for government counterparts. • Training in liaison mechanisms, PRA, village SWOT, village development planning process • Capacity building in agricultural and rangeland development proposal and investment design 	<ul style="list-style-type: none"> • Process skills development in land and water planning and facilitation. • Capacity building in land and water use development proposal design and appraisal (applying technical, environmental, financial, social appraisal criteria). • Capacity building in assessing the cumulative and offsite SLM impacts (both spatial and temporal) of developments. 	SLM-1

Baseline Outcomes	GEF Increment Outcomes	GEF SPs
Development of the enabling environment: policy and procedural support		
	<ul style="list-style-type: none"> • Develop the policy, institutional and regulatory environment required to support the land and water use planning at the various scales. • Build government capacity to undertake village-level land and water use planning with participating communities. • Identify improved land tenure arrangements which will allow and encourage longer term investments in SLM. • Investigate the types of land and water use and environmental disputes that are evident within the project area; and the types of disputes that are likely to emerge in the future; in order to identify mitigation and avoidance strategies. • Provide training to government officers in environmental conflict analysis and environmental dispute resolution techniques, particularly environmental mediation. • Piloting and testing of new technologies or approaches to sustainable natural resource management. • Helping develop skills and processes for government and communities to undertake environmental risk assessments of new developments. • Further development of policy, stakeholder coordination, and institutional frameworks to allow the development of national land and water use strategies and plans. 	SLM-1
4. Identification and demonstration of innovative approaches		
<ul style="list-style-type: none"> • Piloting, testing and demonstrating innovative approaches to increasing agricultural productivity and incomes for the rural poor. 	<ul style="list-style-type: none"> • Piloting, testing and demonstrating innovative approaches to SLM, land and vegetation rehabilitation, water conservation, and biodiversity conservation in agricultural and rangeland areas. 	SLM-2
5. Investments in implementing SLM		
<ul style="list-style-type: none"> • Community investments in productivity increases and rural income generation. 	<ul style="list-style-type: none"> • Identification and funding of priority SLM community investments that precede or integrate with income generating investments in agricultural production. 	SLM 2
<ul style="list-style-type: none"> • Household rural enterprise investments in productivity increases and income generation. 	<ul style="list-style-type: none"> • Identification and funding of priority SLM household investments that precede or integrate with income generating investments in agricultural production. 	SLM 2

C.3 Sustainability

97. Strategies to ensure ecological, financial, social, economic and institutional sustainability are embedded within project design. Ecological sustainability is the clear objective of both village-level and catchment and landscape level planning processes. Community and household investments will only be made once the proposed activity has met explicit environmental sustainability criteria.

98. **Social sustainability** will be achieved by building the capacity of communities to undertake their own village and sub-catchment level land and water use plans, with appropriate technical support. The organisational capacity of communities will be developed through project activities, and training in SLM concepts and processes will be provided for both communities and government staff.

99. **Economic sustainability:** the project has a strong and explicit focus upon sustainable income generating activities at both the household and community levels. Improvements to livestock production efficiency and profitability will be sought through technological improvement which will at the same time reduce total grazing pressure on the rangeland. Community and household capacity to make sound investment decisions will also be part of community capacity building training. This will ensure both social and economic sustainability.

100. **Financial sustainability:** Communities will be trained in financial planning within their project designs so they make provisions to cover the operating, maintenance, and replacement costs of any investments made. The allocation of funding to communities and households will be contingent upon explicit provisions within investment design being made to recover these costs. Communities and households will also be required to make cash and in-kind contributions as a prerequisite for investment funding from the project. This ensures a level of community ownership of project activities. The level of community and household contributions will be contingent upon the type of project being implemented, the proportion of public versus private good that will accrue as a result of implementation, and the financial circumstances and need of the community or household.

101. **Institutional sustainability:** all project planning processes and activities will be aligned with existing Government of Eritrea institutions and planning frameworks. The GEF project is designed so that a counterpart catchment and landscape planning unit will be set up within government and trained over the life of the project. Project activities and outcomes include the building the capacity of government counterpart staff.

C.4 Replicability

102. The Project will utilize a number of strategies which will ensure its replicability especially within the context of TerrAfrica. The first of these is that the baseline project involving agricultural development as a method of poverty alleviation for poor rural communities closely parallels the GOE's own intended policy focus. However the GEF project increment adds the additional benefit of addressing sustainable natural resource management. Thus it has the additional value of demonstrating that agricultural development and income generation can occur together.

103. The second aspect of the project that enhances its replicability is that the project is located within two distinct agroecological zones, the central highlands and the western lowlands. Thus the project will be addressing a wide range of problems and supporting communities with a wide range of livelihood strategies. Thus the lessons learnt from the project will be applicable to most of the remainder of the country.

104. Thirdly the project plans to select both technologies and processes which will be applicable outside the project area.

105. Finally the project has within its design the building of government capacity, policies and institutions in order to continue project activities beyond the project boundaries and timeframe.

C.5 Stakeholder involvement

106. A comprehensive stakeholder analysis will be undertaken as part of the PDF-B investigation and the LRDP appraisal process. However an initial stakeholder identification process was conducted during the IFAD formulation mission and during the development of this Concept note. A more detailed consultation with stakeholder will also be undertaken during the PDF phase of the GEF project.

107. The primary stakeholders are the community beneficiaries within the GEF project area. In particular, the project would ensure that the needs of potentially marginal groups such as poorer households, female-headed households, and internally displaced people are targeted.

108. Other key stakeholders are:

- Government agencies and their political representatives. The Ministry of National Development, Ministry of Agriculture, Ministry of Land Water and Environment, Ministry of Local Government, Ministry of Education, and the administration at the Zoba, sub-Zoba and village/Kebabi level.
- National Agricultural Research Institute.
- Non-government organisations.
- Commercial rural service providers in the project area

109. The GEF project will be integrated with the baseline LRDP and thus will utilise the same participatory processes. At the community level this will involve employing the same Community Driven Development approach.

110. Brief consultations were held with a number of rural communities as part of the LRDP formulation mission. Within these consultations a number of issues were raised that underlined the need for some of the outcomes targeted by the GEF project. Issues such as land degradation, loss of forests and loss of prime grazing land to cropland, and water development issues, were mentioned by communities as being of concern to them.

D. FINANCING

D.1 Financing and co-financing plan

111. While a more complete analysis of the co-financing contributions will result from the IFAD appraisal process and the GEF PDF phase, the contributions of the parties to the full sized project have been calculated as a result of the formulation process. The cost-sharing between the partners for the LRDP is currently being finalised and the individual contributions to the full programme costs of \$41,800,000 (including the GEF contribution) are expected to be as follows.

- GEF: \$6,000,000
- Government: \$700,000
- IFAD: \$12,400,000
- OPEC: \$7,800,000
- Beneficiaries/clients: \$14,900,000

The indicative programme components, GEF resources, and co-financing, are illustrated in Table 2.

Table 2 Indicative GEF resources and co-financing for indicative project components (USD million)

INDICATIVE COMPONENTS	GEF USD	IFAD USD	GOVT USD	OPEC USD	BENEFICIARIES USD	INDICATIVE TOTAL USD
A. Community Driven Investment Programme						
Community Capacity Building Development	-	2.2	0.2	-	-	2.4
Community Capacity Development for Natural Resource Management	1.7	-	0.1	-	-	1.8
Community Natural Resource Management Investments	4.0	-	-	-	0.7	4.7
Community Agriculture Production Investments	-	-	-	7.8	1.4	9.2
Subtotal	5.7	2.2	0.3	7.8	2.1	18.1
B. Productive Investment Programme						
Policy and Procedural Support	0.3	-	0.15	-	-	0.45
Forage and Livestock Development	-	2.9	0.15	-	-	3.05
Private Investment in Productive Enterprises	-	5.8	-	-	12.8	18.6
Subtotal	0.3	8.7	0.3	-	12.8	22.1
C. Programme Facilitation and Institutional Support						
Programme Facilitation Unit		1.5	0.1	-	-	1.6
Total Programme COSTS	6.0	12.4	0.7	7.8	14.9	41.8

112. IFAD, the Government, the Global Environment Fund (GEF), OPEC and the community beneficiaries would finance the Programme. IFAD would finance USD 12.4 million (29.7%). The Programme clients would contribute 11.6% of investment costs in under the Community Driven Investment Component and 58.9% under the Productive Investment Programme Component providing 35.6% of total programme costs (USD 14.9 million). GEF would contribute 14.4% (USD 6 million) and OPEC 18.7% (7.8 million) for the Community Driven Investment Component. The Government would contribute 1.6% (USD 0.7 million) to cover the tax element on all goods and services procured under the Programme as well as income tax for programme staff. Government contribution would, thus, be in the form of foregone taxes and duties on all LRDP inputs that involve funding from the IFAD loan or any other external source of funding associated with the IFAD loan. The estimate of foregone taxes and duties was based on the rates in effect at the time of Programme design.

113. Upon successful entry into the Pipeline PDF B, resources would be requested to fully develop the project. The PDF B project is expected to last 12 months and cost in the range of \$US350,000.

E. INSTITUTIONAL COORDINATION AND SUPPORT

E.1 Core commitments and linkages

114. The expanded project objectives through the inclusion of GEF activities are highly compatible with IFAD's country strategy for Eritrea and will help the Fund to realize these goals.

115. The current Country Strategic Opportunities Paper (COSOP) for Eritrea, prepared in 1998, identified IFAD's niche role as "reducing the vulnerability of agricultural production to variations in rainfall and judicious local management of natural resources." The COSOP proposed investments to

make crop and livestock production less risky through provision of water for crop production, as well as support for intensive and extensive livestock raising. It recognised that most of the IFAD target group owns livestock and recommended integrating livestock into the farming systems so that by-products contribute to raising overall productivity.

116. The Inception Memorandum for the LRDP was prepared and adopted by IFAD in October 2005. This memorandum provided the initial basis for the work of the LRDP Formulation Mission, with all aspects of the proposed programme being subjected to research, analysis and verification by the mission in close consultation with the Government. It is noted that the GOE and IFAD have engaged in dialogue during 2005 which is leading towards the preparation of a new COSOP which sets out a strategy for future development cooperation. The thrust of the new COSOP is aligned with the GOE's Interim Poverty Reduction Strategy Paper (I-PRSP) and has been reviewed and fully endorsed by GOE. The three main opportunities identified through the draft COSOP were:

- Livestock and forage development and rehabilitation programmes;
- Sustainable natural resource management including: (i) watershed management schemes in the highlands; (ii) irrigation development to utilise runoff from high rainfall areas; and (iii) forestry and agro-forestry development in non-arable areas.
- Establishment of a national seed multiplication system to provide high quality seeds for the major food

117. The GOE has indicated that its highest priority is in the area of livestock development with emphasis on income generation with the rural poor. It has further indicated that it prefers the new programme to be implemented in four sub-Zobas in Gash Barka Zoba (Tesseney, Goluj, Upper Gash and Shambuqo) and in two sub-Zobas in Debub Zoba (Dbarwa and Sena'fe).

118. The Government of Eritrea has embarked on a programme to address the key rural issues within the I-PRSP framework. Major contributions to economic growth are expected to derive from the following key strategies:

- creating an enabling environment for a strong and competitive economy in which an efficient, export-oriented private sector thrives;
- investing in infrastructure, institutional development and the principal sectors of the economy;
- raising the skills and well being of the people by investment in education, health, water and sanitation services; and
- formulating and implementing programmes that are intended to stimulate rapid economic growth to reduce poverty and minimize dependence on foreign assistance.

119. The Government's development vision as stated in the I-PRSP is to "attain rapid and widely shared economic growth with macroeconomic stability and a steady and sustainable reduction in poverty. The cornerstone of Eritrea's development strategy is investment in its human resources, technology, and economic infrastructure to enhance productivity, export competitiveness, trade and investment in high potential growth sectors in which Eritrea has a comparative advantage. This will be achieved by promoting competitive private sector development supported by effective public sector management and a strong public-private partnership".

120. Government remains committed to mobilising Eritrea's strong reserves of social capital, forged during the liberation struggle, and reflected in the presence of viable local representative institutions through which development efforts are effected. Government rural development policies and macro-economic objectives highlight the importance of these local institutions. Nevertheless, to alleviate poverty and accelerate economic growth, more attention needs to be paid to enhanced ownership over the development process by communities and their representative institutions. Such a bottom-up approach fits well with Government's focus on strengthening the role and decision-making power of Zoba and sub-

Zoba structures, and supports Community Driven Development (CDD), as elaborated in the Government Proclamation for the Establishment of Regional Administration 86/96 (PERA).

121. The proposed project will therefore provide a strategic opportunity for consolidation of national efforts and international support to SLM related activities mentioned in the baseline scenario, the project will actively explore and develop links and synergies with existing institutions and on-going strategies, programmes and projects, to support cross-sectoral coordination and participatory approaches for the mainstreaming of SLM in national and local plans, the following levels of linkages are envisaged and will be further explored and clarified in the PDF implementation phase:

- Ensure close linkages between the proposed GEF increment of the LRDP and other IFAD or GEF co-financed projects in Eritrea, in particular the IFAD Gash-Barka Livestock and Agriculture Development Project, and the UNDP-GEF funded Project Sustainable Land Management in Toker Dam catchment, to support replication of experience and spread of lessons learned in SLM.
- Ensure close linkages between the members and activities of the National Action Plan Steering Committee (NAP-SC) to support its efforts in the implementation of the NAP through optimization of existing resources and mobilization of additional funding for combating desertification and SLM.
- Contribute to and support the National Forum on Land Degradation in its deliberations and the formulation of recommendations to the NAP-SC.
- Forge close linkages between various institutions at central level involved in SLM-related activities to support cross-sectoral coordination and ensure linkages between their dedicated projects related to SLM and poverty reduction; such as the National Agricultural Research Institute, the MOA, MLWE, MLG, and MND.
- Ensure close linkages between various institutions at local level involved in SLM related activities to support participation and ownership of SLM related activities at local level and the mainstreaming of SLM policies in local plans and activities. The LRDP utilises participatory processes and seek capacity building outcomes through its Community Driven Development approach. In this way it will contribute to demonstrating the value of community participation in identifying and implementing innovative SLM practices and mainstreaming of these practices in local plans and activities.

E.2 Consultation, Coordination and Collaboration between IAs, and IAs and ExAs

122. The proposed GEF-funded CLM Project would link to, and implement, key strategies of the *TerrAfrica Initiative* such as: a) to mobilize partners in a coalition to advocate a common vision of SLM, share analyses, set the foundations for strengthening and harmonizing policy dialogues and strategies, and improve coordination at all levels; b) to provide a platform for TerrAfrica partners at all levels to identify, generate, and disseminate targeted knowledge that supports decision-making, informs policymaking, advances mainstreaming (in particular in PRSPs, donor strategies and sector plans), helping secure domestic financing, and supports the harmonization of monitoring and evaluation activities by governments, donors, and civil society organizations and c) seeking to catalyze the mainstreaming of SLM and the harmonization/development of investments on the ground at multiple scales, from the local to the national levels.

123. By partnering with TerrAfrica, the Project forms key partnerships between GEF, IFAD, OPEC and the Government of Eritrea, and local communities and institutions, in order to address the primary causes of the severe land degradation that is threatening the livelihoods of the rural poor. The GEF CLM project will integrate SLM initiatives with agricultural production investments in order to mainstream and sustain these initiatives over the longer term. Lessons learnt and knowledge gleaned from the project experience will be collated and made available in a manner that will optimise its relevance and accessibility to other countries in the region.

124. The LRDP baseline intervention will ensure that there is a mechanism for coordination and programme guidance between and within implementing and executing agencies through the setting up of a national Programme Steering Committee (PSC). It is expected that the PSC would meet twice per year. It would be formed from representatives of the main stakeholders, with suggested membership as follows: Ministry of Agriculture Representative (Chairman); Ministry of National Development; Ministry of Land Water and Environment; the Governors of the two participating Zobas, and the National Union of Eritrean Women. There may also be other representatives of programme stakeholders invited to participate in the PSC if required by virtue of their interest and ability to contribute. The Programme Coordinator would serve as secretary to the PSC. The Government has proposed that this PSC serves both IFAD supported programmes in the country.

125. GEF-funded projects in Eritrea are supporting a number of activities in the focal areas of biodiversity conservation, climate change and SLM. As an outcome of a stakeholder consultation forum to be conducted early on within the GEF funded component, under the LRDP each of these projects will become part of a learning network so that lessons learnt from activities in one arena can be utilised in other areas.

126. Consultations regarding the GEF project concept have been held with both the GEF Focal Point in Eritrea, Director General Department of the Environment, Ministry of Land Water and Environment; and the United Nations Convention to Combat Desertification Focal Point, Director General of the Department of Agricultural Promotion and Development, Ministry of Agriculture.

127. Consultation has also been held with the UNDP, regarding opportunities for developing synergies between this GEF Project and the planned UNDP-implemented Sustainable Land Management medium sized GEF financed project within the Toker Dam catchment to the north west of Asmara (within parts of Zoba Maekal, sub-Zobas Berik and Serejeka). The UNDP project will focus upon improving catchment management within the catchment providing Asmara's water supply. There are a number of opportunities for exchanging progressive lessons learnt between the UNDP-implement project and this proposed IFAD-implemented GEF project.

E.3 Implementation/Execution arrangements

128. The GEF funded incremental project will be closely integrated with the baseline LRDP. Consequently the implementing/executing structure and process for the GEF component will be the same as the baseline project. Personnel, resources and activities funded by GEF will be housed with and administered by the same structures described earlier for the LRDP.

129. UNOPS will be responsible for the financial supervision of the LRDP including the integrated GEF component.

PART II – PROJECT DEVELOPMENT PREPARATION

A - Description of Proposed PDF B Activities

130. The PDF-B funding would be utilised to undertake the baseline studies required to more precisely design and align the full GEF project. Baseline studies would be conducted within the following core area.

A.1 Stakeholder analysis and stakeholder consensus building

131. One of the first tasks for the PDF-B will be to identify key stakeholders, highlight their important issues and key roles, and identify opportunities for coordination between the various parties. Two strategies will be employed by the PDF-B. Firstly individual stakeholder consultations will take place so that needs and issues can be more precisely identified. Secondly, a series of stakeholder meetings and a final summative workshop will be conducted in order that:

- stakeholders can be made familiar with the full GEF project objectives,
- stakeholders can build a consensus on project objectives, strategies, outcomes, outputs and partners.
- stakeholders can identify their potential roles within the project,
- the PDF-B can identify what strategies and resources are necessary in order to support stakeholders in fulfilling those roles.

A.2 Catchment and landscape planning and management study

132. Catchment and landscape planning and management is the core activity of the GEF project. It involves linking community-generated plans at the village level to broader catchment and landscape level issues and processes. It is critical that preparatory pre-design work is undertaken in this area in order to identify the appropriate operational strategies, institutions and resources for the full project. These preparatory studies will involve the following activities.

- Assess current local land use planning, and catchment and landscape level planning activities occurring within the project areas, and elsewhere within Eritrea.
- Provide an analysis of policies, policy mechanisms, legislation, institutions and strategies that have been utilised elsewhere within Africa and in the developed world to implement local/regional and national catchment management frameworks that have relevance to Eritrea and from which Eritrea can learn.
- Propose landuse planning strategies, technologies and resources (including required technical assistance) appropriate for village-level SLM planning, and catchment/landscape planning and management in the project areas.
- Conduct an assessment of the causality of land degradation within the study area and recommend strategies to address these primary causes which may be incorporated within the full project.
- Undertake a rehabilitation needs assessment of project sites including assessing current landuse; identify a range of appropriate sustainable land management technologies for the landuses in the project areas; identify a range of appropriate land rehabilitation technologies including soil and water conservation techniques and revegetation and reforestation strategies.
- Identify the selection criteria that should be utilised for selecting and prioritising community and household investments in SLM within the full GEF project.

A.3 Land Tenure Study

133. Current land tenure arrangements within Eritrea provide a substantial barrier to longer term investments in SLM by individual households. Nevertheless traditional land tenure systems within the country have social and economic equity benefits. What is needed is a strategy that identifies, facilitates, and supports the testing of innovative land tenure arrangements that preserve both the social and economic equity of traditional systems, as well as allow and encourage longer term investments by individual households in land, water, and vegetation resources.

134. PDF-B investments would allow the first steps in this strategy to be undertaken ie. the scoping out and identification of potential innovative land tenure arrangements. Such arrangements may already be in existence within the study area or elsewhere within the country. Alternatively there may be lessons learnt that can be identified from experiences in other countries with similar constraints. The GOE has already moved to address this issue and clearly sees it as a serious policy and operational issue. In the first instance the GEF PDF-B funding, and later the full GEF project, would aid and support the GOE in developing and piloting initiatives in this important area.

A.4 Environmental Conflict Analysis

135. There is increasing anecdotal evidence that land use and water use conflicts are beginning to escalate within Eritrea. This was not surprising, given the increasing competition over land and water resources and the concurrent rapid land-use changes that are occurring. Any effective land-use and water use planning at local and regional levels will require some form of environmental conflict analysis to be effective. Introducing environmental conflict analysis in the land-use planning requires three strategies to be effective. Firstly there should be an analysis of existing conflicts evident within the study area. Secondly likely future conflicts should be identified in order that the planning process can either avoid or mitigate them. Thirdly those undertaking land and water use planning, both communities and support staff from government, require training in environmental conflict analysis and environmental dispute resolution.

136. The PDF-B would undertake to conduct an analysis of existing conflicts, scope out likely future conflicts, and define the environmental dispute resolution training needs of both communities and government staff.

A.5 Capacity building assessment of sectors and agencies involved in the project areas

137. The PDF-B would help facilitate the sectors and agencies who will be involved in the project areas identify their strengths and weaknesses in relation to the SLM outcomes sought by the project. These strengths and weaknesses will be analysed and capacity building targets and strategies identified. These analyses will contribute to the design of the training programmes as well as help design the policy and institutional support that may be required in the area of SLM.

A.6. Training needs assessments and curriculum development for participating communities and government officers.

138. Training and capacity building is an important component of the GEF project. In order for the full project to begin functioning effectively from its inception, it is important that preparatory work is conducted to define the training needs and develop appropriate curricula for the target groups. The PDF-B would conduct training needs assessments and develop curricula outlines for both community level training and the training of government technical staff in SLM.

139. In order to do this, it would be necessary to undertake a pilot study in both a lowland and a highland of village. In the pilot studies training needs assessments would be undertaken of both participating villagers and the available support staff within government. From this experience, core templates for training curricula would be developed. Within the full GEF project these core templates could be later added to or modified to suit the needs of various communities and their supporting

government technical staff. Both the training needs assessment methodology and the training curriculum outlines would provide solid starting points for the full GEF project.

140. To ensure local relevance, the capacity building tasks would thus follow on from those related to the previously listed activities: catchment and landscape planning; the land tenure study; capacity building assessments; and the environmental conflict analysis.

A.7 Institutional and Policy Analysis

141. . An analysis will be undertaken of the legislative and policy frameworks and their supporting institutions in relation to land and water use planning and management in Eritrea. The analysis will highlight where institutional or policy gaps exist, or where there are potential opportunities for further inter-agency coordination. Strategies for addressing these gaps or enhancing these opportunities will be identified for implementation by the full GEF project.

A.8 Project design and preparation

142. The key activity for the PDF-B will be the final project design and preparation for the full GEF project including project strategies, staff resources, appropriate SLM technologies, work plans, timeframes and costings. In addition, it will be important to define precisely how the GEF project will integrate with the broader LRDP.

143. The project design will include within it a Monitoring and Evaluation framework which will track the implementation progress and impacts/outcomes and outputs of each of the GEF project activities.

B- PDF Block B Outputs

144. The principle output from the PDF-B will be the GEF Project Brief, supported by the required analytical and background work and implementation plans. The PDF-B activities will also ensure that awareness is raised regarding the project and local participation is mobilised. Specific outputs generated by the PDF-B process would include:

- Stakeholder analysis and stakeholder consensus building and workshop outcomes.
- Land degradation study in project area including identification of primary causes and potential solutions.
- Framework for land and water use planning at the local/village level and at the catchment/landscape level; including identification of appropriate strategies, technologies and necessary technical staff resources.
- Recommendations for sustainable land management technologies and land rehabilitation technologies.
- Selection criteria for prioritising and selecting household and community investments in SLM.
- Outline of current land tenure arrangements in project area and, where necessary, the identification of improved land tenure arrangements which can be piloted during the full GEF project lifetime.
- Environmental conflict analysis describing recent past, current, and likely future environmental conflicts with suggested conflict mitigation and avoidance strategies.
- Policy and institutional opportunity analysis and gap analysis and recommended strategic support to be provided by the full GRF project.
- Basic templates for training needs analyses and curriculum outlines for community level training and the training of supporting technical staff within government.

C- Justification

145. The GEF project is required to ensure the development of global environmental benefits in the context of SLM within Eritrea. This project will pilot and develop strategies, technologies, capacities, and policy and institutional frameworks to help the GOE ensure that the agricultural development strategies it is pursuing will also incorporate longer term sustainable land and water management.

146. The GEF PDF-B funding is necessary to develop the preparatory activities, compile the baseline knowledge and identify the appropriate strategies and frameworks for the full project. It will provide the following outcomes:

- Undertake the necessary baseline studies which are necessary to design the full project:
 - assess social, policy and institutional capacities;
 - undertake issues analysis and land degradation survey
 - identify appropriate SLM strategies and technologies
 - undertake a gap analysis and constraints analysis and recommend solutions to fill the gaps and address the constraints.
 - Identify appropriate land tenure frameworks and environmental dispute resolution strategies.
- Complete the design of the full GEF project and the Monitoring and Evaluation framework
- Ensure that full project can begin implementation activities as soon as possible after project commencement with little downtime.
- Raise awareness, build consensus and mobilise resources amongst stakeholders and partner organisations.

147. The GEF project investment will ensure that the IFAD/OPEC funded LRDP will also incorporate SLM strategies within its agricultural development and livelihoods building programme.

D-Timetable

148. There are a number of GEF PDF-B activities which would be more efficiently and effectively carried out in conjunction with the IFAD LRDP appraisal mission. The precise timetable details would be confirmed once the timing for the IFAD LRDP appraisal mission has also been set.

149. GEF PDF-B activities would be completed within 12 months; the exact timing would depend upon the date of GEF funding approval. It is expected that the majority of activities would be likely be completed within two missions. An initial mission would be conducted in May-June 2006, with a second mission in November –December 2006. Ideally the initial mission would coincide with the IFAD LRDP appraisal mission.

150. It is envisaged that the full GEF project proposal would be submitted to the GEF Council by May 2007. An indicative timetable for PDF-B activities is given in Table 3 below.

Table 3: PDF-B Timetable: May 2006 – May 2007

No	PDF-B Activity	M	J	J	A	S	O	N	D	J	F	M	A	M
1	Stakeholder analysis, consensus building and workshop	x	x	x										
2	Catchment and Landscape study	x	x	x	x	x	x							
3	Land tenure study	x	x	x	x									
4	Environmental conflict analysis	x	x	x	x									
5	Capacity building assessment of sectors and agencies	x	x	x	x									
6	Training needs assessments and curriculum development							x	x	x	x			
7	Institutional and policy analysis							x	x	x				
8	Project design and preparation				x	x				x	x	x	x	x

E-Budget

The PDF-B budget for each activity is given below in Table 4, and the co-financing by source in Table 5.

Table 4: PDF-B Budget by activity

PDF B Activity	GEF	Co-financing IFAD	Co-financing (See notes below) GOE	Co-financing (See notes below) Beneficiaries	Total USD
Stakeholder analysis, consensus building and workshop	25,000	10,000	10,000		45,000
Catchment and landscape planning study	120,000	20,000			140,000
Land Tenure Study	35,000	5,000		10,000	50,000
Environmental Conflict Analysis	25,000			5,000	30,000
Capacity Building Assessment of Sectors and Agencies	25,000	10,000	10,000		45,000
Training needs assessment and curriculum outlines	35,000	10,000	10,000	5,000	60,000
Institutional and Policy Analysis	35,000	25,000	10,000		70,000
Project Brief Design (incl. M&E framework)	50,000	10,000			60,000
Total USD	350,000	150,000	30,000	20,000	500,000

Notes for budget table:

1. Contributions from GOE will be those of existing staff resources.
2. Contributions of beneficiaries will be in-kind.

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The State Of Eritrea
Ministry of Land, Water & Environment
Department of Environment

دولة إرتريا
وزارة الأراضي والمياه والبيئة
قسم البيئة

08 January 2006

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Dateቁ.መ.
Ref. No.

DE/4.7/24/06

التاريخ

رقم السجل

TO: MR. JAMES CARRUTHERS
ASSISTANT PRESIDENT, PROGRAMME MANAGEMENT DEPARTMENT,
IFAD
FAX NUMBER: +390654593459

CC: CARLOS TITO SANTOS
GEF UNIT

FROM: MOGOS WELDEYOHANNES
DIRECTOR GENERAL OF DEPARTMENT OF ENVIRONMENT AND GEF FOCAL
POINT
MINISTRY OF LAND, WATER AND ENVIRONMENT
TELE NO.: 291-1-120311
FAX NO.: 291-1-126095

SUBJECT: ENDORSEMENT LETTER FOR PROJECT ENTITLED: "CATCHMENT AND
LANDSCAPE MANAGEMENT IN ERITREA" (GEF PDFB DRAFT 9-1-06 DOC)

Dear Mr. Carruthers,

After reviewing the project document thoroughly, I hereby endorse as a GEF focal point in Eritrea, the project entitled: "Catchment and Landscape Management in Eritrea" (GEF PDFB draft 9-1-06 Doc).

Please receive our highest regards and support on this matter.

Best regards,

MOGOS WOLDE-YOHANNIS
DIRECTOR GENERAL



Appendix 2 Bibliography (in chronological order)

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Appendix 3 sub-Zobas in Eritrea: the GEF project targets sub-Zobas Tesseney, Goluj, Upper (La'elay) Gash, and Shambuqo in the Western Lowlands; and sub-Zobas Dbarwa and Senafe in the Central Highlands.

MAP OF ERITREA BY SUBZOBAS

