

**UNITED NATIONS DEVELOPMENT PROGRAMME
GLOBAL ENVIRONMENT FACILITY
CONCEPT PROPOSAL FOR PIPELINE ENTRY
AND PDF B REQUEST
(PIMS 3008)**

Country:	Nicaragua
Focal Area:	Land Degradation
Operational Programme:	OP15- Sustainable Land Management
Strategic Priority:	Main emphasis on SP 2 with important SP 1 elements
Project Title:	Sustainable Land Management in drought prone degraded areas of Nicaragua
Duration:	4 years (estimated)
Requesting Agency:	UNDP
Cooperating Agency:	FAO, IFAD
Estimated Full Project funding:	USD 10,000,000 (minimum); of which GEF is USD2,000,000; Other co-financing is minimum USD8,000,000 and more to be determined
PDF B Request:	USD455,700 total GEF funding: USD340,700 Government funding: USD25,000 UNDP funding: USD50,000 Global Mechanism Funding: USD40,000
PDF B Duration :	12 months
Council submission:	February 2005

COUNTRY DRIVENESS AND ELIGIBILITY

1. Faced with accelerated land degradation processes and widespread conditions of extreme poverty in areas highly vulnerable to drought and desertification, the Government of Nicaragua subscribed to the UNCCD in October 1997, ratifying it in February 1998. Since the entry into force of the Convention in May 1998, Nicaragua has the support of the international community for the implementation of measures that contribute to abating desertification processes and for sustainable land use in drought-prone areas. The Ministry of the Environment and Natural Resources (MARENA) initiated a participatory process with government agencies, NGOs, Universities and Municipal authorities which enabled the formulation and implementation of a National Action Plan (NAP) to combat drought and desertification, which aims to stop and revert on-going desertification processes and

learn to co-exist with cyclical drought conditions in a way that is compatible with the sustainable use of natural resources.

2. This process culminated in March 2003 with the official publication of the National Action Plan (NAP) to Combat Desertification and Drought in Nicaragua¹, which defined four strategic lines to orient future programs and projects:
 - Reclamation of degraded soils in the dry lands of Nicaragua
 - Mitigation of the environmental and social impact of drought in the dry lands of Nicaragua
 - Protection of natural resources: soil, water, forests and biodiversity.
 - Institutional strengthening at the national and municipal levels.
3. In order to respond to the first strategic line, which seeks to revert the soil degradation process in dry lands of Nicaragua, the NAP suggests a series of land use planning approaches, as well as the design of soil and water conservation systems adapted to the potentially critical agricultural and forestry drought-prone areas.
4. The second strategic line of action in the NAP aims at mitigating the impact of drought in dry lands of Nicaragua, through the establishment of an early warning system and a drought mitigation plan. By focusing on issues of food security in drought-prone areas, these key result areas seek to strengthen local and national capacities to manage climate and weather related information for informing land and water users.
5. The third NAP strategic line deals with the restoration and sustainable management of key ecosystems in dry lands in Nicaragua. The fourth and final strategic line identified in the NAP has to do with institutional strengthening at the national and local level. It seeks to increase national capacities to implement the UNCCD through the formulation of public policies and the mainstreaming of the NAP into other policy arenas. It also seeks to strengthen local institutional capacities through regional, departmental and municipal commissions in order to guarantee the sustainable use of natural resources, and the regulation and protection of critical water resources. This strategic line also comprises efforts geared toward increasing public awareness and participation of civil society in combating desertification and drought. The proposed project is conceived as a priority of the Government to address all of these strategic lines.
6. Nicaragua therefore has a strategic framework and a recent history of informed public policies aimed at the territorial management of natural resources. However, there is a gap between these strategic visions at the national level and the institutional capacities to reach these objectives in the most vulnerable regions and populations. Furthermore, the GoN has shown considerable political commitment to dryland sustainable development, and has received assistance from the Global Mechanism,

¹ MARENA 2003 Plan Nacional de Acción para la Lucha contra la Desertificación y la Sequía.

but has not yet been able to ensure adequate and sustainable budgetary allocations. As will be seen in the next section on the national context in Nicaragua, these limitations are due in part to financial and macro-economic constraints, but also to inadequate mainstreaming of dryland concerns, and lack of institutional coordination that would enable the integration of diverse interventions aimed at improving human development at the local level.

7. The present Concept has been developed based on the results of the afore-mentioned participatory processes that led to the NAP. The proposal has been defined in close consultation with the CCD Focal point at MARENA and other involved authorities and counterparts, such as the Ministry of Agriculture, Livestock and Forestry (MAGFOR), the Rural Development Institute (IDR), the Ministry of Education (MED), the Ministry of External Relations (MINREX), FAO, IFAD and institutions and NGOs working in the field of sustainable land management. During the execution of the PDF B, these and other stakeholders, such as municipalities and local communities, will be involved in the formulation of the full size project through workshops aimed at defining priority actions and execution arrangements.
8. In addition to the NAP, there are several other national strategies and action plans related to development and natural resource use issues: Since 2001, the government of Nicaragua has developed a Reinforced Strategy for Economic Growth and Poverty Reduction (ERCERP), in the context of the Highly Indebted Poor Countries Initiative (HIPC). The fundamental objectives of this strategy are the protection of the most vulnerable groups of the population, as well as the definition and implementation of new programs of sustainable development. The ERCERP recognizes and stresses the importance of the agricultural sector in the Nicaraguan economy and the considerable potential that rural areas can play in poverty alleviation.
9. Four main areas of intervention were defined by the Strategy:
 - Broad-based economic development, centered on productive diversification
 - Investment in Human Capital: education, health, livelihoods
 - Protection of the most vulnerable groups
 - Governance and institutional strengthening.
10. Furthermore, environmental vulnerability is considered a cross-cutting issue given its growing importance, and its linkages with other areas of development policy. Increasing environmental resilience must become an objective of any development or investment plan in favor of the poorest sectors of the Nicaraguan society. The Secretariat for Strategy and Coordination (SEC) is the government agency responsible for coordinating and monitoring the implementation of the ERCERP objectives. This HIPC initiative should enable the reduction of up to 70% of Nicaragua's foreign debt, which would mean an annual saving equivalent to 5% of GDP, which could be then invested in additional poverty reduction actions.

11. Within the policy framework of the ERCERP, the Government of Nicaragua (GoN) has privileged a territorial approach which seeks to strengthen the legal and regulatory instruments linked to land use planning and sustainable use of natural resources. This strategic planning process has contributed over the past years to the drafting of a new Forestry Law and to the launching of several land use planning programs, clearly complimentary to the NAP. One of these pilot programs is the Programa Nacional de Ordenamiento Territorial (PRONOT) which seeks to develop and validate local land use planning approaches at the Municipal level. The PRONOT program will be a useful platform for applying soil and water conservation approaches at the local level in Nicaragua's dry lands.
12. The Government of Nicaragua presented in 2003 its National Development Plan (Plan Nacional de Desarrollo) which is the main national policy framework which defines a series of common development goals, as guiding principles for Nicaragua's development. This Plan will create a National System for citizen participation, seek to create an alliance between government and civil society, and thus address many of the governance issues mentioned above.
13. Although environmental degradation is not identified in the National Development Plan as the most urgent development issue, a clear linkage is drawn between poverty, environmental degradation and vulnerability with respect to natural disasters. Underscoring this concern for ensuring the environmental sustainability of development in Nicaragua, is the need to develop low impact agriculture, and innovative ways to enhance rural livelihoods while preserving key ecosystem functions and stability.
14. In the above mentioned policy frameworks, there is an explicit reference to the need for the development of norms and criteria for land use planning and water resources management, in order to ensure their conservation and sustainable use. This strategic planning defines that one of the keys to reduce ecological vulnerability of the country is to develop an adequate territorial planning approach. Similarly, the Environmental Policy and Plan of Nicaragua 2001-2005 (Política y Plan Ambiental de Nicaragua 2001-2005 –PANic), which analyzes the fundamental environmental problems and proposes palliative actions, stresses in particular the territorial dimension of sustainable development.

COUNTRY ELIGIBILITY

- UNCCD Convention Signed 21/11/1994
- UNCCD Convention ratified 17/02/1998
- Entry into Force 18/05/1998

PROGRAM DESIGNATION AND CONFORMITY

15. The proposed program conforms with the vision of GEF OP15 and its objective of mitigating the causes and negative impacts of land degradation on the structure and functional integrity of ecosystems through sustainable land management practices while contributing to improving people's livelihoods and economic well-being. It addresses several of the causes behind land degradation, and proposes the integration of land management with national development and poverty reduction plans, promotes approaches for cross-sectoral attention to land degradation, the creation of an enabling environment in terms of national and local policies and the effective participation of stakeholders.
16. This will be done by a combination of the OP's two strategic priorities, capacity building for mainstreaming of the country's finalized NAP into national and local development policies and plans, and with a major emphasis on on-the-ground action to demonstrate SLM practices, the development of national and local capacities for implementation of actions aiming at sustainable land management, and also through the emphasis on the channeling of resources towards sustainable agricultural practices and the validation and dissemination of these. The aim is to build on and enhance the global environmental benefits of a healthy baseline of on-going rural development activities in Nicaragua's drought-prone areas. The project will be designed in accordance with the GEF's principles of incremental financing.

PROJECT CONTEXT

Socio-economic and Environmental context

17. Nicaragua is the second poorest country in Latin America and the Caribbean, with half its population of 5 million people living below the poverty line. Almost two thirds of the country's population lives in urban areas, with less than 40% residing in rural areas². Nicaragua is also the largest country in Central America, extending over 130,000 square kilometers. Dry lands in Nicaragua encompass an extension of 40,000 km², about a third of the national territory. Dry lands in this country are densely settled, concentrating about 80% of the country's population.
18. With less than 0.13% of the world's land surface, Nicaragua harbors about 7% of the world's known flora and fauna³. A substantial proportion of Nicaragua's population co-exists and interacts with a considerable variety of those ecosystems (a total of 78 terrestrial and aquatic ecosystems have been identified by the National Biodiversity Strategy⁴). In the dry lands of Nicaragua, the dominant ecosystems are dry tropical

² INEC, Informe General de la Encuesta Nacional sobre medición del nivel de vida, 2001.

³ TWSC, 1990. Incluido en la Primera Comunicación Nacional ante la UNCCC, Marzo 2001.

⁴ MARENA, Estrategia Nacional de Biodiversidad, 2001.

broadleaf, tropical semi-deciduous forests and scrublands, pine forests and pine savannahs.

19. 53% of Nicaragua's municipalities are considered to be extremely poor, of which most are located in dry lands. Dry land areas include ten of the country's departments. These are the following: Nueva Segovia, Madriz, Estelí, Chinandega, León, Managua, Rivas, Masaya, Granada and Carazo. They also encompass portions of the departments of Matagalpa, Jinotega, Boaco and Chontales. These regions are comprised of 116 municipalities, which is over half of the country's local governments.
20. The most severely affected municipalities in the above-mentioned departments are those in which cumulative annual rainfall is inferior to 400mm. There are 24 municipalities within these departments that represent the most critical conditions of land degradation and vulnerability to drought. According to MAGFOR's Strategy for Drought Management, the population in these municipalities suffers most of the effects of the El Niño phenomenon. These are the following:
 - Santa María, Ocotal, Dipilto, Mozonte, and San Fernando in Nueva Segovia Department.
 - Somoto, San Lucas, Telpaneca, Yalaguina, Totalgalpa and Palacaguina in Madriz Department.
 - Pueblo Nuevo, Condega, La Trinidad, Estelí Central, in Estelí Department.
 - La Concordia in Jinotega Department.
 - San Isidro, Sebaco, Ciudad Dario and Terrabona in Matagalpa Department.
 - Teustepe and San Lorenzo in Boaco Department.
 - San Francisco Libre and Tipitapa in Managua Department.
21. A recent study conducted by the Universidad Centroamericana (UCA)⁵, has estimated that 34% of the national territory is prone to cyclical drought, equivalent to 41,148.03 km². Similarly, the NAP prioritized those areas with the highest risk of desertification and whose inhabitants face the greatest vulnerability to the effects of drought⁶ (approx. 15,000 Km²). The above 24 Municipalities are included in both analyses.
22. These areas lie within the Central American "drought corridor" in which the dry seasons last over six months a year. During the last major drought registered in the region, the World Food Program (WFP) calculated that 1.5 million smallholder farmers were directly affected by the lack of rainfall, crop failure and livestock losses among small producers who did not know or did not have adequate know-how adapted to drought conditions, and were therefore continuing to use unsustainable land use practices.

⁵ "Caracterización agrosocioeconómica de la zona seca de Nicaragua", 2002.

⁶ "Estudio País sobre Desertificación en Nicaragua", MARENA, 1999

23. The population in these Municipalities is among the most impoverished in the country, living on an ever diminishing resource base, increasingly degraded ecosystems that are vulnerable to natural disasters, with a limited degree of diversification in their livelihood options, difficult access to markets, deficient public and productive infrastructure and no access to credit. This critical situation can also be measured by lack of access to education (30% illiteracy rate), precarious health and nutritional status with high infant mortality rates⁷.
24. As for land use, according to the UCA study, the majority of the area in the Municipalities is dedicated to pastures (48%), followed by fallow land (17%), forest land (9%), annual crops (13%), perennial and semi-perennial crops (7%). The study calculates that 44% of the area is adequately used, 50% of the total area is overused and 4% is under used. Figures on forest cover estimate a deforestation rate in dry lands of almost 40,000 ha/year between 1980 and 2002.
25. The main productive activities in terms of labor employment in the dry lands are subsistence agriculture and extensive livestock raising. The former is characterized by the production of maize, beans and sorghum, using slash-and burn agriculture in small holdings. Land tenure figures show a predominance of small farms: 50% of the farms in dry land areas are of less than 3.5 ha, while 31% lie in the range between 3.5 -17.5 ha⁸. This land tenure structure often leads to over-utilization of productive lands and is also a factor behind temporary migration due to the low incomes generated.
26. According to the UCA study, the dry lands in Nicaragua stand for 49% of the national production of beans, 33% of the maize and 100% of the sorghum, showing the importance of these regions for the national economy as well as the importance of ecologically sustainable agricultural practices to sustain national production in the long run. However, there are several sub-regions, especially the most drought-prone areas, where yields have been rapidly declining in recent years due to unsustainable practices, indicating the need for developing mechanisms for sustaining production and protection of the environment.
27. As to ranching, the high percentage of land used for pasture and the low number of bovine cattle per area unit (1 cattle/ha), shows the extensive use of the land. Pastures are most often natural grasslands and there is little use of improved grass varieties to raise productivity. The extensive use by larger cattle-raisers is ecologically viable, but leads to the expulsion of poorer peasants towards more marginal lands, and is thus a factor behind land degradation on the marginal lands. Livestock raising on both marginal and productive land could be intensified in a sustainable way through improved grass varieties and other measures aimed at raising production levels, however techniques must be found that would do so while maintaining ecosystem integrity. There is an important market for dairy products from dry lands, especially cheese, in neighboring countries, the development of which could contribute to

⁷ "Agenda de Políticas del Sector Agropecuario y Forestal", MAGFOR, 2002.

⁸ In Nicaragua, farm size is measured in *manzanas*, 1 mz equaling 0.7 ha.

raising income levels. However, more attention needs to be paid to the ecological sustainability of both extensive and intensive livestock systems.

Problem Statement and Root Causes

28. The vicious cycle of poverty in rural Nicaragua, according to a recent assessment conducted by FAO in the context of its Food Security Program (PESA), reflects that the livelihood of a high portion of the population of the 24 municipalities most vulnerable to drought, depends on the primary productivity of ecosystems and agro-ecosystems, and is therefore highly vulnerable to fluctuations in rainfall patterns and to declines in soil productivity. A major cause behind land degradation is the application of production practices that do not conform with the ecological conditions of these territories, and are not able to cope with increasing frequency of droughts.
29. Almost half of the territory of these Municipalities is currently being overused and unsustainably managed, leading to severe land degradation. Among the main factors related to human pressure on land are unsustainable agricultural practices, (especially slash-and-burn agriculture and farming on hillsides); the colonization of new lands for cultivation leading to devegetation and deforestation, fragmentation of natural watersheds and reduced ecosystem integrity; other inappropriate land use changes especially due to unregulated migration; the excessive extraction of wood for fuel; and the contamination and sedimentation/reduced flow of rivers due to erosion and excessive fertilizer/agro-chemical use.
30. The pervasive degradation of environmental assets (soil, water, forest), in turn, tends to reduce the resilience of existing livestock and agro-ecosystems. It also implies a progressive drop in ecosystems productivity and agricultural yields, worsening the level of vulnerability of the rural population that depends on these natural systems for their livelihoods. This feeds into the vicious circle by which land degradation exacerbates existing poverty conditions in rural communities, and at the same time these conditions of poverty perpetuate the pressure on public goods and environmental assets.
31. The critical situation of these Municipalities and of the dry lands in general, forces the population to migrate to the sub-humid and humid tropical forest regions of the country, especially to the Biosphere Reserves of Bosawas (Autonomous Region of the North Atlantic) and South East (Autonomous Region of the South Atlantic), contributing to the advancement of the agrarian frontier and to the accelerated deforestation in these areas, with direct consequences in terms of soil loss and erosion (overall, deforestation rates in Nicaragua are calculated at 120,000/year, of which approximately 40,000 are in dry land areas). These migration flows are thus affecting two major biodiversity hotspots.
32. Crop cultivation in the dry land municipalities utilizes limited techniques and unsustainable management processes increase soil erosion and reduce aquifer recharge rate, due to increment surface run-off. This also leads to increases in

riverbed sediment load and the likelihood of flash floods. Furthermore, energy consumption by households and small rural industries depends primarily on native forests which are only 9% of drylands.

33. The livestock sector is also contributing to land degradation, although to a relatively lesser extent, and with the main difference that the main root cause is not inappropriate technologies, but land use anomalies. Options need to be explored such as finding suitable alternative livelihoods for small livestock raisers on marginal land, such as small ruminants, pigs and poultry, or employment in related processing industries (dairy).
34. As to the institutional setting for land management, a main problem is the existing gap between national plans and strategies and the implementation of these on the ground. Land degradation issues are treated sectorally and there is little integration of the ecological, economic and social dimensions of this phenomenon when designing policies. Land management is often related to farming production and receives attention through different technical assistance projects focusing on the peasant population (see below), but there is often a lack of attention to the linkages to the institutional level (land use planning, budgetary structures for land management, etc.) and to other sectors (forestry, energy, water, etc.).

Barriers for Implementing Sustainable Land Management

35. Among the major barriers that impede the successful adoption of more sustainable land management practices, the following can be itemized:
36. Inefficient institutional linkages between national strategies and local realities. Nicaragua has developed a considerable number of national action plans and strategies which provide sound policy frameworks for its territorial organization, the conservation of biodiversity and the combat of desertification and drought. However, there is a gap between what is defined in government documents at the national level and local realities. Institutional linkages and local technical capacities are not developed in order to improve the implementation of national action plans and strategies. Legal and regulatory frameworks need to be adapted locally through municipal level land use planning exercises and instruments, in order to guarantee viable local governance arrangements. There are few mechanisms for promoting sustainable land use. Even though there are possibilities of using real estate taxes (IBI) for conservation and restoration purposes, there are few municipalities that have the capacity to implement this type of scheme. Also, within the institutional framework, community participation in land management issues is limited, thus hampering effective sustainable land management because of the lack of ownership and commitment from local communities.
37. Several municipalities in dry land areas have promoted the formulation of local development plans, where the issue of land use and watershed management as a means for protecting vital ecosystems stand high on the agenda. However, the lack of

human, technical and financial resources limits their possibilities for carrying out these plans. In addition, both at the national and local levels, there is a need for institutional coordination, as well as coordination between different development projects, in order to implement existing plans.

38. Related to the above is the difficulty in promoting integrated approaches that relate the importance of ecosystem functions to economic and social processes, including institutional settings for sustainable land management. There is a certain degree of inter-institutional and cross sector integration, but land management is still basically treated sectorally. Thus, there is a need to promote the mainstreaming of land management issues in overall national and local policies. One opportunity for this is given through the fact that national development strategies increasingly integrate a territorial dimension, taking into account the geographical particularities of different regions and aiming at coherent interventions based on specific priorities for each territory. Such mainstreaming would have the added purpose of ensuring greater government commitment (political and financial) to sustainable dry land development.
39. Limited access to basic services such as credit and technical assistance by smallholder producers, is in part due to the absence of secure land titles, which in turn restricts possibilities for productive investments in soil and water conservation, landscape and ecosystem restoration.
40. There is a deficient knowledge base in terms of applicable land management practices in dry regions of Nicaragua. Although there are many examples of original farmer to farmer experimentation in sustainable agriculture in Nicaragua, as in the case of UNAG Programme “Campesino a Campesino” (PcaC, see also below), all of these efforts have been geared to humid lands, and there is a need to focus more on adapted techniques for dry lands, particularly in the use of micro-irrigation, conservation agriculture, and adapted crop rotation, in order to increase productivity and improve resilience of agro-ecosystems to periods of drought. There is also an incomplete understanding and monitoring of the processes which contribute to accelerate and/or mitigate land degradation in Nicaragua, particularly in areas of particular biological importance and in key watersheds.

BASELINE

41. As mentioned earlier, the Government of Nicaragua has formulated a National Action Plan for combating Desertification and Drought (NAP-CCD), which constitutes a starting point for mainstreaming sustainable land management issues.
42. However, although the GoN presented its NAP in April 2003, it has yet to have consolidated the political and financial backing necessary to implement such an ambitious program. Among the most critical issues left to be addressed, as seen earlier in the section on root causes and barriers, is a considerable need for developing institutional capacities and channeling existing financial resources to

those communities and groups who are restoring key ecosystems and actively combating desertification and drought. In this sense, the present GEF Alternative would seek to lift the key barriers that would lead to effective operationalization of the NAP.

43. Among the policy framework developed recently that relates to land management, the following can be mentioned:
- The General Policy for Land Use Planning and its regulation (2001). Its objective is to guide land use in a sustainable way, and its guidelines refer to the multi-sector and integrated approach of land use planning, with stakeholder participation at national, regional, municipal and community levels. It should be mentioned that several departments, with support from the international community, have established land use plans that include a series of projects to be carried out for sustainable land management.
 - The Law of Fiscal Equity (2003), among others, establishes categories for real estate taxation and exonerates protected areas and indigenous territories from this municipal tax. This Law permits the possibility of establishing incentives for conservation and restoration of ecosystems, in accordance with the General Environmental Law of 1996.⁹
 - The Ministerial Resolution 38-2003, in accordance with the General Environmental Law, specifies the procedure for obtaining certification by MARENA in order to apply for incentives for conservation and restoration activities.
44. A summary gap analysis of the existing baseline in terms of policy frameworks and on-going programs, reveals many overlaps and several gaps that the GEF Alternative will be in a position to fill. For example, there are clear opportunities in terms of building upon existing policy frameworks such as the National Development Plan, and contribute to the implementation of the National Action Plan for combating desertification and drought. There is a clear gap in terms of mainstreaming the NAP into National Development Policy frameworks, and the GEF project seeks to develop mechanisms for mainstreaming and for translating existing national strategies into local plans and sustainable land use practices. Many of these national frameworks still need grounding and need to learn from local experiences in land and drought management.
45. In order to address the institutional capacities to deal with the range of multi-lateral environmental agreements the GoN has subscribed to date, the Ministry of the Environment and Natural Resources (MARENA) has recently received GEF funding through the United Nations Development Program to carry out a National Capacity Self Assessment. During this process, to begin in 2004, government focal points of the three major conventions (UNCCD, UNCBD, UNFCCC), along with other national actors from the NGO community and Universities, will explore synergies

⁹ The Law of Fiscal equity abolished one clause of the General Environmental Law, related to the possibilities of tariff exemption for imports of goods used for conservation activities.

and joint programs to improve capacities to comply with these international conventions. Also, capacity needs will be identified for institutions related to the conventions. This exercise will serve as input in the PDF B formulation process of this project.

46. In order to solve financial constraints, the GoN has set out, with support from the International Fund for Agricultural Development (IFAD), to create a series of trust funds to help finance rural development processes. These trust funds are particularly geared to the objectives of the National Poverty Reduction Strategy, which is to generate rural employment, and strengthen small and medium size businesses in rural areas. Among these various trust funds one can mention the creation of the Fundación para el Desarrollo Tecnológico Agropecuario y Forestal de Nicaragua (FUNICA) which operates a support fund for applied agricultural and forestry research in Nicaragua (Fondo de Apoyo a la Investigación Tecnológica Agropecuaria y Forestal de Nicaragua -FAITAN). This competitive trust fund aims to stimulate the development of appropriate technology by small and medium size rural entrepreneurs in order to supply the national and international market. Additionally, the Government has created the Fondo de Asistencia Técnica (FAT) which aims at increasing the productive and marketing capacity of these small and medium size producers in rural areas.
47. Three major programs led by the IDR have had positive results in terms of inter-institutional coordination in the dry regions of Nicaragua, these include TROPISSEC, PROSESUR and PROCHILEON, which focus on the sustainable productive development of rural communities vulnerable to recurrent drought. The IDR is currently about to launch an ambitious program for the economic development of the dry regions of Nicaragua, with funding and technical assistance from IFAD. This program has already been formulated and is being funded from a variety of sources including IFAD, IDB and National Counterparts for a total of USD24 million (Programme for Rural Development of the Dry Lands of Nicaragua or PRODESEC). It is geared toward the reduction of rural poverty in Nicaragua through the increase of family income. It will center its efforts on the promotion of local employment and businesses, the development of rural financial services which enable employment generation and the development of small and medium size businesses. This program will also create a Competitive Trust Fund for the Financing of Employment and Businesses (Fondo Competitivo de Financiamiento de Empleo y Negocios - FOPEN) which will enable the co-funding of capacity development plans, as well as employment generating initiatives in dry regions of Nicaragua.
48. As to the securing of land tenure rights, there have been major investments in land titling during recent years. Presently, at the national level, around 19% of farms do not have a legal title, a figure that is relatively low considering the magnitude of this problem a decade ago. Presently, the IDR includes land titling in their programmes, an activity that is seen as complementary to the proposed GEF interventions through the full size project. Also, the Office for Rural Titling (OTR) has a major project,

PRODEP (Programme for Property Regulation), that in a first phase is concentrating land titling in several dryland departments (Chinandega, Madriz and Estelí).

49. Since 1999, with financing from the Spanish Cooperation, FAO has administered the Programme for Food Security, coordinated by MAGFOR and executed by the Nicaraguan Institute for Farming Technology (INTA). The components of the project include small scale irrigation systems in areas with high climatic risks; sustainable intensification of production; diversification of production, seeking viable productive options; and analysis of the organizational framework to strengthen farmer participation. FAO is presently formulating an extension of this programme with a focus on dry lands, and is a natural partner to the present GEF initiative.
50. Among the programmes and projects promoting sustainable agriculture is the aforementioned farmer to farmer programme PCaC. Initiated by the National Union of Farmers and Ranchers (UNAG) in 1987, it promotes sustainable alternatives for small farmers around the country and has a stable network of promoters on the ground. It focuses on small scale experimentation and the diffusion of knowledge and sharing of experiences among the poorer sectors of the rural peasantry. The PcaC works at the national level, but efforts would be intensified in dry lands in collaboration with the full size GEF project.
51. UNDP and the GoN are working closely with the development of institutional capacities in the regional and departmental development councils. There are several local human development initiatives which are also focusing on community or municipality level initiatives for sustainable development.
52. Nicaragua's Ministry of Environment and Natural Resources, through its National Office for Climate Change and Clean Development (ONDL) is undertaking a regional project financed by GEF through United Nations Development Program. The project "Capacity Promotion for Phase II of Adaptation to Climate Change in Central America, Mexico and Cuba" (PAN-10-00014290) has a duration of three years (2003-2005). The project's objective is to strengthen the institutional as well as the main stakeholders capacities to evaluate the vulnerability and adaptation of the prioritized systems against climate change, variability, risks and extreme events. In Nicaragua, the prioritized systems are water and agricultural resources. At present, the project is finalizing the present vulnerability of these systems and throughout 2004, it will conduct the future vulnerability of the systems as well as the Adaptation Strategy. Through 2005 and 2006, the project will develop an Adaptation Plan as well as other inter-related activities. This project is a clear partner to the present GEF initiative.
53. As to existing research, several projects and research institutions have addressed the topic of sustainable land management in dry land areas. Among these can be mentioned Nitlapán/UCA, with a study presenting a zoning of agrarian systems and a typology of farmers, as well as a diagnosis of the dry land corridor by UCA, several

diagnoses made by TROPISec and the Programme for Sustainable Agriculture on Hillsides in Central America (PASOLAC).

54. The present initiative is a clear opportunity for the Government of Nicaragua to join forces with GEF through its Operational Program on Sustainable Land Management, in the context of support to the implementation of the NAP, while building on important public investment processes in the dry regions of Nicaragua. In the implementation strategy to be designed during the PDF-B phase, an important component will be to discuss with IDR and IFAD, as well as with MARENA and MAGFOR and define a common approach to bolster the effectiveness of different programs in the dry regions of Nicaragua, while better defining and negotiating the GEF increment.
55. The majority of the above mentioned projects are designed to focus on poverty reduction, farming systems and farmer's livelihoods. The GEF intervention is designed to build upon this baseline scenario in three ways:
 - Strengthen the regulatory framework for the protection of soil resources and sustainable land use at the national and local levels, with a cross-sectoral and integral perspective. Land use planning, capacity building, mainstreaming and incentive mechanisms will be part of this.
 - Facilitate the access of rural communities to gain access to advantageous sources of funding and knowledge on best practices on sustainable land management, with channeling resources towards areas most vulnerable to land degradation. Existing projects often have a supply driven logic, and resources are not always directed towards the areas most in need. The GEF Alternative proposes to guide investment through the afore-mentioned land use planning exercises, specifically at the local level, and address gaps such as renewable energy, and sedimentation/contamination of waterways.
 - Facilitate the dissemination and replication of innovative and successful practices, in the institutional as well as farming sphere.

PROJECT RATIONALE AND OBJECTIVES

Development Objective

56. The global objective of the project is to contribute to increasing ecosystem integrity, stability, functions and services, through the promotion and mainstreaming of sustainable land management policies and practices using a cross-sectoral approach, thus also contributing to people's livelihoods and economic well-being.

Project Objective

57. This project aims at creating the enabling governance arrangements, the financial conditions and the knowledge base for sustainable land management practices to take

root and be widely adopted in rural areas of dry land Nicaragua. By focusing on sustainable livelihoods and local actions plans for restoring key ecosystems, many of these human-induced pressures on land can be reduced and provide long term global benefits through the restoration and conservation of ecosystem integrity in the dry lands of Nicaragua. These global benefits are consistent with the incremental cost approach proposed by the GEF.

58. Through the implementation of a Sustainable Land Management approach, the GEF alternative will build on, complement, and leverage additional environmental benefits to the existing baseline of rural development projects of IFAD, IDR and FAO, in order to achieve ecosystem integrity, stability and functions.

Expected Results

59. The proposed Project is expected to have a duration of 4 years. During the PDF-B, the project team will determine the duration based on assessment of needs, and expected impacts, taking into account GEFSEC's concerns. The project will contribute to three expected results, each with a certain degree of autonomy, but interrelated. The PDF B Process will conduct a full incremental cost analysis and based on the expected benefits to the global vs. national levels, will determine the division of responsibilities between GEF and other funding for the project.
60. **Expected Result 1. Strengthening of institutional mechanisms for mainstreaming sustainable land management issues and for translating existing national strategies into local plans and sustainable land use practices.**
61. There is already a recognition within the country of the need to revert the ongoing land degradation processes in key ecosystems, and considering that Nicaragua has developed a series of national action plans and strategies which define priority areas of intervention to deal with the problem of desertification and drought. The project will therefore focus, on the one hand, on harmonizing and consolidating the legal and institutional framework (including laws, bylaws, standards, fiscal and tariff instruments, among others) and on the other hand, on creating the bases for the practical application of sustainable land management approaches and techniques in critical agro-ecosystems of Nicaragua through integrated land use planning. These will be based on a capacity needs assessment carried out during the PDF B, as well as on negotiations with the baselines of PRODESEC and PESA, and delimitation of the geographical area to be covered by the full project.
62. At the national level, the expected results are the consolidation of a national institutional framework attending the main causes of land degradation in Nicaragua: in the first place, through the creation of legal, organizational and budgetary conditions necessary to attack land degradation, including the possibility of engaging HPIC funds, innovative nature/debt swap, and/or through a National Environment Fund; and in the second place, by implementing concrete land management plans on the ground. This implies in turn the enabling of local institutions and the participation

of local actors which interact in rural environments and have a direct involvement in agriculture and natural resource use. Specific attention will be given to the development and application of incentive mechanisms for sustainable land management, both at the national as well as the municipal level.

63. This result will contribute towards achieving the global benefit of mitigating the negative impacts of land degradation through mainstreaming sustainable land use practices, in order to maintain ecosystem integrity. This will be attained through the use of an integrated and cross-sectoral approach in action plans and strategies, as well as in legal and institutional instruments.
64. **Expected Result 2. Facilitate access to existing financial and technical mechanisms for the adoption of sustainable land management practices in critical drought prone areas of Nicaragua, promoting on the ground investments in order to contribute to reducing land degradation and out migration from rural areas.**
65. The Project will proceed from detailed analysis of the land degradation situation in Nicaragua, particularly in drought-prone areas of the country. The aim of this second component is to channel on the ground investment in pilot projects which will contribute to improving the local organizational and productive capacity of the population. Thus, this result builds on the baseline of IFAD, IDR and FAO projects, aiming at directing investments toward specific vulnerable areas, in accordance with developed land use planning. This component of the project will increase local capacities in terms of testing sustainable land management practices, and in terms of restoring key ecosystem functions and services.
66. In collaboration with ongoing applied research projects, this project component will support the validation, consolidation and demonstration of innovative land and water management practices, geared to improving agricultural yields through the diffusion of soil and water conservation techniques, agroforestry and sustainable animal husbandry systems in the drylands. During the PDF B phase, agreements will be sought with universities and research centers already working in this field, as well as with the PCaC, in order to join forces for the testing, monitoring and evaluation of different sustainable land management practices.
67. By improving and strengthening existing organizational and institutional capacities, it is hoped that the Project will be instrumental in improving access by local producer organizations and community organizations to financial instruments and technical assistance available through existing trust funds such as the IFAD financed FAITAN and the FAT. By working in close association with the IDR program PRODESEC, the replicability of the innovative land use management approaches will be made possible, as well as potential from mainstreaming Sustainable Land Management approaches into the broader policy arenas at the National level. The value added of the GEF lies in the integral attention that aims at combining institutional mechanisms for sustainable land management with productive activities on the ground.

68. A secure land tenure provides an enabling environment for sustainable land use investments and is a key element for channeling financial assistance. As there are ongoing programmes already addressing this issue (OTR and IDR), the GEF project will coordinate with these, paying specific attention to areas where sustainable land management and land use planning schemes will be implemented. The PDF B will carry out an analysis of the need for and scope of GEF activities related to land tenure.
69. Overall, the activities to be developed will be organized through pilot projects and demonstrative processes aimed at maintaining ecosystem integrity while improving rural livelihoods. These activities can be divided into four major blocks:
- Innovative water and soil conservation practices, including rainwater capture and micro irrigation projects, and restoration of sedimented/contaminated waterways
 - Sustainable agricultural practices, including conservation agriculture
 - Sustainable livestock and animal husbandry , particularly linked to integrated land use planning and alternative livelihoods
 - Community forestry and agro-forestry approaches, with a focus on renewable energy and forest restoration
70. One of the expected results in this Project component is the promotion of innovative sustainable land management approaches and techniques which emanate from local arenas and local organizations following the PCaC model, and which can be validated through timely demonstration efforts and the participatory application of findings and approaches.
71. Identifying successful and replicable land management practices will require on-the-ground testing of the former component in order to succeed. It also provides the seeds for future innovation diffusion and the adaptation of soil and water conservation techniques to the institutional and environmental conditions of dry lands in Nicaragua. In this sense, there will be a strong connection between the findings of the baseline applied research, and on-the-ground investments in terms of applying and duplicating best practices in sustainable land management.
72. The criteria for success in this component is the involvement of a large number of actors at the local level in order to truly validate these sustainable land management approaches in the field, thus creating conditions for their replicability. As such is also ties up with the first component of this Project in terms of guaranteeing conditions for the successful mainstreaming of sustainable land management practices and approaches into relevant national and local policy arenas.
73. This result will contribute to the global objective of sustainable land management practices and ecosystem stability and integrity, thus also aiming at improving people's livelihoods and economic well-being.

74. Expected Result 3. The dissemination and replication of best practices of the program is promoted nationally and internationally.

75. As this is a 4 year pilot demonstration project, there is a need for replication to other parts of drylands in Nicaragua. The GEF Alternative will create the conditions necessary for such replication through extraction and dissemination of best practices and lessons learnt, which will be complemented by incentives mechanisms. The Project also seeks to share the best practices and policy options with other countries in Central America facing similar land management problems. In this sense a final expected result is that if these former components are successful in terms of providing timely and replicable approaches to sustainable land management in Nicaragua, these practices will also be useful for other rural populations outside the country, particularly in the Central American region which shares many common traits and common ecosystems with Nicaragua.
76. The activities contemplated in this component include a national and international promotion and dissemination plan which would facilitate the sharing of successful results and best practices, the flagging of innovative marketing approaches and the horizontal exchanges with other countries and initiatives in the Central American region. Implementation would include training seminars for community groups country-wide, the elaboration of handbooks for municipal authorities regarding land use planning. Also, together with existing baseline projects, manuals for farmers and other instructive materials will be developed and disseminated.
77. Key actors with which linkages would be sought, include the CCAD and different regional projects (UNDP, IDB World Bank and others). One specific example would be the Indigenous Corridor project of the WB/IDB/GEF. Also, it is important to mention the support being provided by the UNCCD Global Mechanism for the development of a Sub-regional Action Plan to Combat Desertification and Drought, which would provide an opportunity for Nicaragua to share with its neighboring countries innovative approaches and practices of sustainable land management.
78. Through the emphasis on information dissemination and replication, this result will contribute to the overall global goal of ecosystem integrity, stability and functions in terms of improving the institutional setting for SLM as well as promoting sustainable farming techniques. The promotion and replication of best practices will also benefit sustainable land management at the national level.

Summary of problems, barriers and proposed interventions

79. The identified problems, barriers and proposed interventions of the GEF project, are summarized in the following table (proposed interventions relate to each project result – R1, R2 and R3):

Problem	Barriers	Proposed interventions
Weak institutional framework for dealing with land degradation	<ul style="list-style-type: none"> • Insufficient institutional linkages and coordination • SLM is approached sectorally • Existing gap between formulation and implementation of plans • Lack of norms and criteria for land use planning and water resources management • Legal and regulatory frameworks, including mechanisms to promote SLM, need to be adapted locally through municipal level land use planning exercises and instruments. Within this framework, community participation in land management issues also needs to be promoted. • Low local technical, human and financial capacities to improve the implementation of national action plans and strategies. 	<ul style="list-style-type: none"> • Mainstreaming of SLM in national and local policies and authorities (R1). • Support to the implementation of development plans, with a cross-sectoral and participative approach, through technical assistance and on the ground investments (R1). • Revision and development of laws, regulations and incentives for SLM (R1). • Revision of institutional and budgetary frameworks for SLM at national and municipal levels and development and implementation of sustainable arrangements, including incentive mechanisms (R1). • Validation, consolidation and dissemination of successful results in order to promote replicability of best practices (R3)
Unsustainable land management practices lead to land degradation	<ul style="list-style-type: none"> • Weak local organization and community involvement in land use planning and natural resource management. • Limited access to basic services such as credit and technical assistance by smallholder producers, in part due to the absence of secure land titles. • Lack of investment in employment generating activities compatible with the principles of SLM. • Existing sustainable practices are not adapted too drylands, and not well consolidated and disseminated. 	<ul style="list-style-type: none"> • Channeling on the ground investment to pilot projects which will contribute to improve local organizational and productive capacity of the population (R2). • Improve access by local producer organizations and community organizations to financial instruments and technical assistance available through existing trust funds and projects (IFAD, IDR, FAO) (R2). • Validation, consolidation and dissemination of successful innovative land and water management practices in order to promote replicability of best practices nationally and internationally (R2, R3)

SUSTAINABILITY

80. Several aspects will be taken into consideration in the formulation phase and during the implementation of the full size project, in order to assure the sustainability of the program in the long run. These relate to environmental, institutional and financial sustainability, as well as social organization and knowledge management regarding sustainable land management practices.

81. The interventions of the project per se aim at achieving environmental sustainability, through the support for institutional arrangements for sustainable land management, the promotion of land management practices, and the dissemination of successful results in order to achieve replicability.
82. At the institutional level, ways of mainstreaming land management issues in national and local policies will be sought, as a way of attaining sustainability of interventions after project conclusion. Part of this concerns the inter-institutional coordination, which does not necessarily imply high costs if viable institutional arrangements are found. Other aspects relate to the creation of organizational and technical capacities for land use planning and enforcement of development and land use plans.
83. During the PDF B phase, possible budgetary increases and the establishment of financial support mechanisms for dry lands, such as those related to the HPIC initiative, innovative nature/debt swaps and/or a National Environment Fund, will be explored with the Government in order to promote the financial sustainability of project interventions. Also, specific attention will be given to increasing capacities of municipalities to manage their budgets and fiscal systems in order to support sustainable land use and management.
84. Capacity development efforts will be channeled towards local partners, enabling local producer organizations and municipalities access to financial resources to fund sustainable land management practices, in this way contributing to a better use of existing trust funds. By facilitating timely access to funds and knowledge, the program will also create the base upon which local initiatives can be sustained and geared to increasing sustainable land management practices in drought prone areas.
85. The use of local, self-sustained producer organizations and programmes, such as the PCaC, will also contribute to on-the-ground sustainable land management practices among peasant populations in dry land areas after the programme has ended.

REPLICABILITY

86. The expected Result 3 of the program centers on guaranteeing the program's replicability at the national and international levels. Also, much of the purpose of component two of the program will deal with developing adapted land and water management techniques, identifying best practices and local knowledge base, and translating these into adapted SLM approaches for other drought prone regions of Nicaragua.

STAKEHOLDERS INVOLVED IN PROJECT

87. Among the key stakeholders in the program, are the main line ministries for the environment and agricultural sector:

88. MARENA is the focal point for the UNCCD . In order to comply with the engagements underwritten by the Nicaraguan Government, through its Dirección General de Normación Ambiental, MARENA is currently starting to implement its National Action Plan for the Combat of Desertification and Drought. The focal point of the UNCCD has been actively involved in the formulation of the present Concept.
89. The Ministry of Agriculture, Livestock and Forestry (MAGFOR) is responsible for developing national sector policies, promoting technological innovations, monitoring and enforcing plant and animal health standards, supporting the development of markets for agricultural goods and services, as well as the development of entrepreneurial capacities in rural Nicaragua. Jointly with MARENA, MAGFOR is required to ensure that productive processes and land use and forestry are carried out with a sustainable approach. MAGFOR has designed a National Strategy for the Management of Drought, the objective of which is to reduce the impact of drought in the agriculture and livestock sector of Nicaragua, particularly in northern Nicaragua.
90. The Institute for Rural Development (IDR), created in 1994, promotes investment programs for rural development, agricultural production and agro-industry development as well as environmental and forest resource management schemes and land tenure reform programs. It currently manages a large portfolio of public investments, aimed at the dry land regions of Nicaragua within the framework of the Reinforced Strategy for Economic Growth and Poverty Reduction (ERCERP).
91. Similarly, the program also plans to work closely with local governments in those municipalities most severely affected by land degradation and drought, through its on-the-ground investment sub-program. There are several key stakeholders in these areas, in particular the existence of municipal leagues in northwest Nicaragua (Leon and Chinandega), which would enable to articulate in a coherent and consistent fashion the program activities in the field in the country's rural communities most vulnerable to cyclical drought.

INSTITUTIONAL COORDINATION AND SUPPORT

92. This Project comes at a time of political and institutional renewal in Nicaragua. The Government of Nicaragua along with UNDP as its key partner have given new impulses to programs aimed at stemming the rampant levels of rural poverty, by generating employment and public/private partnerships. The country has a sound strategic framework on which to link up this capacity building project, which will enable the National Action Plan (NAP) to gain momentum and have a direct impact on local development processes. By working through incipient regional, departmental and local development committees, an emerging governance arrangement is currently being set up by UNDP in order to strengthen linkages between national strategies and local realities.

93. By working with key partners such as IFAD and FAO, this project will complement on-going initiatives geared specifically toward employment and income generation in the dry land regions of Nicaragua. FAO's experience and on the ground expertise in sustainable agricultural practices and food security will also give the project its technical underpinnings, providing guidance to on the ground investments in terms of water and soil conservation, and restoration of degraded lands. However, such an approach requires key inputs in terms of knowledge generation and sharing, and will build on an already solid tradition in Nicaragua of horizontal exchanges and farmer experimentation initiatives, such as the Equator Initiative finalists-Campesino a Campesino. Close work with Universities, NGOs and community based organizations on the practical applications of sustainable livelihoods will enable the identification and dissemination of good practices in water and soil conservation techniques and ecosystem restoration. It is also hoped that local capacity building of producers, community and municipal organizations will enable them to access some of the emerging financial tools and trust funds for employment generation currently being set up by the GoN, with IFAD support.
94. From an operational perspective, the present program offers a unique combination of institutional and technical capacities through the strategic partnership between UNDP and FAO in Nicaragua, which parallels the close working relationship already existing between MARENA and MAGFOR on issues of sustainable land use and water resources management. These capacities, combined with the territorial presence and public investment capacities of the IDR, give this program real potential for impacting rural communities that are vulnerable to drought in Nicaragua.
95. As to UN agency coordination, it should be mentioned that the proposed project is in line with the United Nations Development Assistance Framework (UNDAF), specifically its line of action "Social and environmental sustainability". Among the goals related to this area are the promotion of policies of land use planning, with an integrated and cross-sectoral approach and the reduction of environmental vulnerability through the promotion of practices for sustainable natural resource use.
96. The project is also in line with the UNDP Country Cooperation Framework (CCF) which for the area of environment and energy states among the expected results: the integration of environmental policies into national and local development plans, the validation of innovative experiences of conservation and sustainable natural resource use; and the strengthening of local capacities to combat desertification processes and to mitigate the effects of drought in critical areas.

LINKAGES TO OTHER GEF PROJECTS AND PROGRAMS

97. Currently, there are several GEF initiatives being implemented by UNDP, UNEP and the World Bank in Nicaragua which are directly related to the present land degradation proposal. These are the following; "Capacity Promotion for Phase II of Adaptation to Climate Change in Central America, Mexico and Cuba" (GEF/UNDP); "Implementation of agricultural, forest and pasture sustainable systems in Nicaragua,

Colombia and Costa Rica (GEF/WB)"; "Nicaragua's National Capacity Self-Assessment (GEF/UNDP)"; "Integrated Management of the Hydric Resources and Sustainable Development of the Rio San Juan Basin and its Coastal Area (GEF/UNEP)" and the "Mesoamerican Biological Corridor (GEF/UNDP)". The proposed PDF B will coordinate with the above initiatives and their respective Implementing Agencies to ensure transfer of knowhow, lessons learnt and coordination arrangements.

INFORMATION ON EXECUTING AGENCY

98. The Ministry of Environment and Natural Resources, created in 1994 is the government's body in charge of this project and of promoting environmental policy, including the planning, administration, control, and research on sustainable management of natural resources. It is also responsible for coordinating several national level strategies geared toward orienting the sustainable development of Nicaragua.
99. The GEF political focal point is Eduardo Marín at MARENA, and the operational focal point is Norvin Sepulveda, located at MARENA, Carretera Norte, km.12 ½, and the telephone for 505-2632082
100. The Nicaragua UNDP Country Office will act as GEF implementing agency for this project and will coordinate directly with other agencies of the System, in particular with its main partner for this venture, the FAO Country Office. UNDP will provide its technical and administrative assistance to the Government of Nicaragua, thanks to its regional and global knowledge networks, its policy advisors and through direct support by the Dry lands Development Center, based in Nairobi, and its regional program for Latin America.

FINANCING PLAN OF FULL PROJECT

Total Project Cost (all figures are estimated):	USD 10,000,000 (minimum)
GEF:	USD 2,000,000
Co-Financing (Tentative):	
IFAD –through PRODESEC	USD 8,000,000
FAO/PESA:	to be defined
Government of Nicaragua:	to be defined
 Total PDF B Funds :	 USD 455,700
GEF:	USD 340,700
Government of Nicaragua	USD 25,000
UNCCD Global Mechanism	USD 40,000
UNDP Nicaragua CO	USD 50,000

PROPOSED PROJECT PREPARATION STRATEGY

101. The present program has defined an implementation strategy based on complementary actions and synergistic partnerships between national and local public institutions, with the support of international organizations, universities, national and local NGOs. Conceived from the onset as a Nationally Executed Program (NEX), this program will seek to respond to the formal request by the Government of Nicaragua, as well as by local municipal leaders in the drought-prone regions of northern Nicaragua, to support the implementation process of the National Action Plan to Combat Desertification and Drought through a model project to be later transferred and adopted in other drought stricken areas of the country. It seeks to develop national and local capacities according to the overall guidelines provided by the NAP, with particular emphasis on support to local communities located in drought-prone areas with degraded lands.

DESCRIPTION OF THE PDF B ACTIVITIES

102. The activities that the preparatory phase of this program will carry out through the GEF grant (PDF B), are the following:

- Assessment of capacity needs among national and local institutions, taking into account the results of the NCSA (to be carried out during 2004 and 2005).
- Comprehensive mapping of existing baseline activities, gap analysis and incremental cost analysis to support the definition of activities to be financed by the GEF full size project.
- Analysis of the existing and potential impact of the livestock sector on the dry lands of Nicaragua. The analysis will also study other initiatives in the country undertaken by different organisms in order to incorporate their know-how on the subject.
- Analysis of the state of vulnerability and adaptability of the water and agricultural systems of the dry areas of Nicaragua to climate change in conjunction with the PAN-10-00014290 Project in order to incorporate the information generated to the FSP proposal.
- Analysis of the legal and institutional framework in order to design project activities that stress the implementation of sustainable land management measures, in particular in the fields of land use planning and incentive mechanisms.
- Diagnosis and selection of the municipalities with appropriate conditions for the execution of demonstrative investments established in the second component of the project.
- Realization of a Stakeholder Analysis at the local level to define the implementation approach to be followed during the PDF-B and FSP.
- Design of an awareness strategy taking into special consideration the effects that the different stakeholders groups have with respect to land degradation and what can be done to mitigate and prevent it.

- Realization of workshops with national and municipal authorities, local communities, universities, NGOs and producer organizations to formulate the FSP at the national, departmental and local levels to define priority actions and follow-up mechanisms.
- Discussion and validation of the institutional framework of the full size project with national authorities.
- Definition of executing arrangements and design of management and coordination units.
- Design of a M&E System. The design will include the identification of the required baseline data. It will also define the time plane for data collection.
- Realization of donor roundtables (both GEF and non-GEF) to assure coordination during the design phase of the project for potential collaboration.
- Negotiation of co-financing with national authorities,
- Exploring/identifying possible increased budgetary allocation to dry lands, linkages to HPIC, innovative nature/debt swaps, and/or a National Environment Fund
- Negotiation of co-financing with donors
- Selection of local and national partners for the implementation of the on the ground activities.

OUTPUTS OF THE PDF B

103. Among the main results of this first design phase of the project carried out with GEF PDF B-funds, are:

- Socio-economic and environmental characterization of the selected municipalities, with emphasis on land degradation problems and means to alleviate these, and including an assessment of needs related to capacity building, financial restrains, eventual land tenure issues to be addressed and investment programmes.
- Mapping of donor initiatives related to sustainable land management and the institutional and legal framework, at the national level as well as in the selected municipalities and gap analysis to define activities to be covered by the GEF/FSP.
- A document providing an analysis of the legal and institutional framework for SLM and identification possible lines of action for the full size project.
- Analysis of the vulnerability and adaptability of the water and agricultural systems of Nicaragua's dry lands undertaken.
- An Awareness Strategy designed to be implemented during the FSP.
- Stakeholder consultations and participatory process of project design.
- Formal agreements with national and municipal authorities regarding the execution arrangements of the program and counterpart co-financing.
- A M&E System designed.
- Co-financing agreements with donors.
- A project document that in detail satisfies GEF and UNDP requirements and defines the identified sub-components based on baseline and gap analysis, the

total project budget and its distribution between project components, the institutional framework and implementation arrangements, the monitoring and evaluation plan, as well as operative and administrative issues (accountability, audits, evaluations, etc). The project document will also contain the design of the executing unit, with defined terms of reference for key personnel in the full size project.

INSTITUTIONAL ARRANGEMENTS FOR THE IMPLEMENTATION OF THE PDF B

104. The national executing agency for the PDF B will be MARENA. The local UNDP office in Nicaragua will have the responsibility for supervising and administering this preparatory phase of the project and will contract the team of consultants to carry out the defined tasks. Activities will be closely coordinated with FAO and IFAD, specifically as regards to technical assistance and expertise. The team working with this preparatory phase will support the negotiation between national authorities related to the project, in particular MARENA, MAGFOR and IDR, and discuss the design of the program with the donor community, financing agencies and NGOs.

JUSTIFICATION

105. Due to the complex nature of the proposed program, and the fact that it intends to conduct joint activities and to explore synergies between already formulated and on-going IFAD and FAO projects, there is a clear need for a preparatory assistance through a Bloc B PDF grant. There is also co-funding for the preparatory phase, as the UNDP CO in Nicaragua has earmarked USD50,000 for this purpose. This preparatory phase will allow for negotiations with the programs key partners, for exploring potential co-funding from other partners and refining the program development strategy, through detailed field work in pilot areas to be identified. The details of management and execution arrangements, as well as the relations with existing projects and programs will be elaborated during the PDF-B.

TIMETABLE AND BUDGET

106. The PDF B will be implemented during a 12 month period. Submission of the Full Project Proposal is expected for February 2005. The following is an output based budget for the PDF B.

PDF B Outputs	GEF	GoN	UNDP	GM	Total
1. Stocktaking (land degradation, capacities, legal/policies, baseline, etc.)	153,000				153,000
2. Stakeholder consultations (LFA workshops)	25,000	10,000	10,000	10,000	35,000
3. Implementation Arrangements, GEF increment and co-finance (donor mapping)	75,000	15,000		30,000	115,000
4. Project document preparation	87,700		40,000		127,700
TOTAL	340,700	25,000	50,000	40,000	455,700

ACRONYMS

ERCERP	Reinforced Strategy for Economic Growth and Poverty Reduction
FAITAN	Support Fund for Technical Farming and Forestry Research in Nicaragua
FAO	UN Food and Agriculture Organization
FAT	Technical Assistance Fund
FUNICA	Foundation for the Technological Development of Agriculture, Livestock and Forestry
HIPC	Highly Indebted Poor Countries Initiative
IDR	Rural Development Institute
IFAD	International Fund for Agricultural Development
INTA	Nicaraguan Institute for Farming Technology
MAGFOR	Ministry of Agriculture, Livestock and Forestry
MARENA	Ministry of environment and Natural resources
MED	Ministry of Education
MINREX	Ministry of External Relations
NAP	National Action Plan to Combat Desertification and Drought
OTR	Office for Rural Titling
PASOLAC	Programme for Sustainable Agriculture on Hillsides in Central America.
PcaC	Farmer to Farmer Programme
PESA	Special Programme for Food Security
PRODEP	Programme for Property Regulation
PRODESEC	Programme for Rural Development of the Dry Lands of Nicaragua
PRNOT	National Programme for Land Use Planning
UCA	Central American University
UNAG	National Union of Farmers
UNDP	United Nations Development Programme

Response to GEFSec Comments:

Comment no.	GEF-SEC COMMENTS	Page no.	UNDP NICARAGUA RESPONSE TO COMMENTS & WHERE TO FIND IT	Page no.
A	The PDF-B should provide more information on the impact of the livestock sector on the ecosystem (access to land, man. Systems).	6	<u>Description of PDF-B Activities:</u> "Analysis of the existing and potential impact of the livestock sector on the dry lands of Nicaragua. The analysis will also study other initiatives in the country undertaken by different organisms in order to incorporate their know-how on the subject."	24
B	The PDF-B should also be used to design an appropriate M&E framework and identify baseline data needs and a time plane for its collection.	8	<u>Description of PDF-B Activities:</u> "Design of a M&E System. The design will include the identification of the required baseline data. It will also define the time plane for data collection." <u>Outputs of the PDF-B:</u> "A M&E System designed."	24 25
1	Role of climate change in the areas and indication that the project will integrate these concerns in the design and implementation strategy.	11	<u>Baseline:</u> 52. Nicaragua's Ministry of Environment and Natural Resources, through its National Office for Climate Change and Clean Development (ONDL) is undertaking a regional project financed by GEF and implemented by UNDP Nicaragua. The project "Capacity Promotion for Phase II of Adaptation to Climate Change in Central America, Mexico and Cuba" (PAN 10-00014290) has a duration of three years (2003-2005). The project's objective is to strengthen the institutional as well as the main stakeholders capacities to evaluate the vulnerability and adaptation of the prioritized systems against climate change, variability, risks & extreme events. In Nicaragua, the prioritized systems are water and agricultural resources. At present, the project is finalizing the present vulnerability of these systems and throughout 2004, it will conduct the future vulnerability of the systems as well as the Adaptation Strategy. Through 2005 and 2006, the project will develop an Adaptation Plan as well as other inter-related activities. This project is a clear partner to the present GEF initiative." <u>Description of PDF-B Activities:</u> "Analysis of the state of vulnerability and adaptability of the water and agricultural systems of the dry areas of Nicaragua to climate change in conjunction with the PAN-10-00014290 .Project in order to incorporate the information generated to the FSP proposal." <u>Outputs of PDF-B:</u> Analysis of the vulnerability and adaptability of the water and agricultural system of Nicaragua's dry lands undertaken.	13 24 25

Comment no.	GEF-SEC COMMENTS	Page no.	UNDP NICARAGUA RESPONSE TO COMMENTS & WHERE TO FIND IT	Page no.
2	It is also suggested to revisit the planned duration of the project.	6 and 11	<u>Expected Results:</u> "59. The proposed Project is expected to have a duration of 4 years. During the PDF-B, the project team will determine the duration based on assessment of needs, and expected impacts, taking into account GEFSEC's concerns."	15
3	It should be discussed what role awareness of diff. stakeholder groups with respect to land degradation and its effects plays. It has not been identified neither as problem nor barrier.	12	<u>Description of PDF-B Activities:</u> "Design of an awareness strategy taking into special consideration the effects that the different stakeholders groups have with respect to land degradation and what can be done to mitigate and prevent it." <u>Outputs of the PDF-B:</u> "An Awareness Strategy designed to be implemented during the FSP."	24 25
4	During PDF-B, a stakeholder analysis should be conducted. It should be reflected in the PDF-0B activities and outputs.	12	<u>Description of PDF-B Activities:</u> "Realization of a Stakeholder Analysis at the local level to define the implementation approach to be followed during the PDF-B and FSP."	24
5	Relevant GEF or non-GEF Initiatives in the project area or countries with similar	12	<u>Description of PDF-B Activities:</u> "Realization of donor roundtables (both GEF and non-GEF) to assure	24

conditions have been identified for potential collaboration with the proposed initiative. Please add.	coordination during the design phase of the project for potential collaboration."
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Comment no.	UNCCD COMMENTS	Page no.	UNDP NICARAGUA RESPONSE TO COMMENTS & WHERE TO FIND IT	Page no.
1	The implementation of harmonised actions with ongoing programmes and projects is addressed while no explicit mention is made of synergistic approaches with other sustainable development conventions.		<p><u>Baseline:</u></p> <p>"In order to address the institutional capacities to deal with the range of multi-lateral environmental agreements the GoN has subscribed to date, the Ministry of the Environment and Natural Resources (MARENA) has recently received GEF funding through the United Nations Development Program to carry out a National Capacity Self Assessment. During this process, to begin in 2004, government focal points of the three major conventions (UNCCD, UNCBD, UNFCCC), along with other national actors from the NGO community and Universities, will explore synergies and joint programs to improve capacities to comply with these international conventions. Also, capacity needs will be identified for institutions related to the conventions. This exercise will serve as input in the PDF B formulation process of this project."</p> <p><u>Linkages to other GEF projects and programs</u></p> <p>97. Currently, there are several GEF initiatives being implemented by UNDP, UNEP and the World Bank in Nicaragua which are directly related to the present land degradation proposal. These are the following: "Capacity Promotion for Phase II of Adaptation to Climate Change in Central America, Mexico and Cuba" (GEF/UNDP); "Implementation of agricultural, forest and pasture sustainable systems in Nicaragua, Colombia and Costa Rica (GEF/WB)"; "Nicaragua's National Capacity Self-Assessment (GEF/UNDP)"; "Integrated Management of the Hydric Resources and Sustainable Development of the Rio San Juan Basin and its Coastal Area (GEF/UNEP)" and the "Mesoamerican Biological Corridor (GEF/UNDP)". The proposed PDF B will coordinate with the above initiatives and their respective Implementing Agencies to ensure transfer of knowhow, lessons learnt and coordination arrangements.</p> <p><u>Description of PDF-B Activities:</u></p> <p>"Assessment of capacity needs among national and local institutions, taking into account the results of the NCSA (to be carried out during 2004 and 2005)."</p>	11
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