



Convention to Combat Desertification

Distr. GENERAL

ICCD/COP(4)/AHWG/3/Add.1
23 February 2001

ENGLISH ONLY

CONFERENCE OF THE PARTIES
Fourth session
Ad Hoc Working Group
Inter-sessional meeting
Bonn, 19 March - 6 April 2001
Item 2(a) of the provisional agenda

SUMMARIES OF REPORTS SUBMITTED BY AFFECTED LATIN AMERICAN AND THE CARIBBEAN COUNTRY PARTIES

Addendum

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ANTIGUA AND BARBUDA

This document is a report produced in compliance with decision 11/COP.1 of the UNCCD with the specific purpose to inform the parties on the progress made towards achieving the objectives of the convention and to enable them to make appropriate recommendations to better pursue these objectives. Nationally this report will act as a guide to the development of the national action plan to combat desertification and land degradation.

Antigua and Barbuda is a twin island nation in the West Indies. When the early settlers arrived in the 17th century, they were deterred by a scarcity of water, although Antigua was noted as a heavily forested island. This dense vegetation was, however, almost completely removed by the time sugar cane cultivation became the dominant feature of the economy.

Today, the islands are still trying to cope with the effects of poor soil types and soil erosion caused by poor agricultural practices. The frequency of droughts and the economic shift to tourism have further complicated the issues and accelerated the rate of degradation. Additionally, recent early stages of land degradation as a result of the passage of hurricanes since 1995 have compounded the situation.

Although desertification is not considered imminent in Antigua and Barbuda, land degradation is a reality. The development of the Convention to Combat Desertification, and Antigua and Barbuda's ratification in 1997, will define a more sustainable path for future development in the country. It is in this spirit that the National Report was compiled.

Section 2 outlines the main factors affecting land degradation in Antigua and Barbuda. These factors relate to natural rainfall patterns and poor land management practices such as soil and sand mining; residential and industrial activities in watersheds; land preparation practices for farming and construction; naturally occurring land and mud slides; degradation of forested areas and other impacts from recent hurricanes.

The national strategies and priorities established within the framework of sustainable development plans, priorities and conventions affecting environment and natural resources are discussed in section 3. The section defines the National Coordinating Mechanism for national environmental action within in which the activities to execute the obligations to the Desertification Convention exists. The process of meeting and reporting as part of this mechanism, serves as a forum to *mainstream* the issues of desertification and land degradation in other conventions and national environmental action planning.

Section 4 details the institutional measures to implement the Convention to Combat Desertification and land degradation. The discussion in this section covers the institutional frameworks that exist to execute action and how they have developed. It outlines the approach being taken, and organizational structure.

This section also includes a table that outlines existing and potential stakeholders involved or that will have to become involved in addressing land degradation and their roles and responsibilities in this area. It also defines

the current legal and judicial nature of the existing executing mechanism and details the human, material and financial resources available.

The National Action Plan to combat degradation is laid out in section 5. It takes into consideration public opinions on land and water resource use and stewardship. The proposal also recognizes the widely held cultural beliefs and abuse of land and watershed resources.

Section 6 addresses the financial mechanism for the implementation of the UNCCD. It also addresses the constraints to implementing environmental activities in Antigua and Barbuda. Section 8 looks at the benchmarks and indicators for land degradation and the urgent need to address the lack of information on the extent of land degradation.

BARBADOS

On 14 May 1997, Barbados signed the United Nations Convention to Combat Desertification and Drought. The Convention came into force for Barbados on 14 August 1997.

This Convention is very important to Barbados for two reasons:

1. The island experiences extreme cases of soil erosion in the Scotland District area;
2. The island is considered to be a water scarce country by the United Nations Development Programme (UNDP) and the Food and Agriculture Organization (FAO).

All measures which Barbados currently has in place to combat desertification and drought were all developed prior to Barbados' involvement with the UNCCD. Barbados is now in the process of preparing its National Action Plan in accordance with UNCCD principles.

ES 1. Strategies Established Within the Framework of Sustainable Development Plans and/or Policies

The Government of Barbados has put in place policies and programmes aimed at achieving sustainable development in accordance with the principles of Agenda 21.

In Barbados the issue of desertification is addressed through policies on land resources. A synopsis of relevant plans and policies pertaining to this area are given below.

Draft National Physical Development Plan (1998)

This document is intended to provide a vision for the future growth and development of the nation by setting out policies to guide relationships among land uses, community facilities and physical infrastructure.

Area Development Plan

The ADP is a project undertaken by the Town & Country Development Planning Office which examines agriculture and non-agricultural land classes, as well as the future land-use policies affecting agricultural land.

The National Park Development Plan 1998 (Final Draft)

This plan seeks to promote land management within the designated park boundaries in such a way that the biodiversity of the various ecological systems are preserved and enhanced for the benefit and enjoyment of the Barbadian society. The Scotland District, an area which experiences severe land degradation, is encompassed in this plan.

The Environment and Natural Resources Management Plan (1998)

This plan seeks to address the issue of sound use and development of all natural resources in the island in a manner that is harmonious with the natural ecosystems.

The Medium-Term Macro-Economic Strategy (1996-1999)

Development policies enunciated in this document establish the Government of Barbados' intentions and expectations for each sector of the economy over the medium- and long-term.

Integrated Coastal Zone Management Plan (1998)

This plan addresses issues regarding land use and resource use in the agricultural sector. Run-off containing substances originating from the misuse of pesticides from agricultural production contaminate water supplies and affect marine life.

Barbados Tourism Development Plan (1998)

The Tourism Development Programme sets out the framework for development of an integrated rural land-use policy bringing greater tourism access and sustainable development to rural areas, such as the Scotland District.

National Tourism Policy

The National Tourism Policy addresses the issues of land degradation and water conservation as these resources are vital to the prosperity of the industry. The broad policy objective of this sector incorporates sustainable development principles through conservation of natural resources.

National Water Conservation Plan

The National Water Conservation Plan is currently undergoing its implementation phase. The measures adopted have been developed to attempt to maximize voluntary reductions before moving to penalizing measures, pressure reductions and system shutdown.

Desalination

There has been a steady increase in water consumption levels which can be attributed to growth in the economy and increased living standards. Facing the prospect of insufficient water to satisfy the Barbadian population, the Board of Directors of the Barbados Water Authority contracted a consultant in August 1995 to examine the feasibility of establishing a desalination facility in Barbados.

In August 1997, PPC examined a submission on a 'Framework for the Development and Management of the Water Resources of Barbados' and accepted among other things, the recommendation that desalination was a viable option for augmentation of the BWA's potable water supply.

The principal constraints hindering Barbados from achieving a sustainable water supply for the next 20 years were identified as:

1. A lack of consistent and appropriate data upon which management decisions can be made; and
2. A lack of technically qualified personnel capable of interpreting that data and implementing the appropriate responses

The Emergency Drought Plan

This Plan identifies parameters, such as rainfall measurements, ground water measurements, salinity and weather data, that would be used to monitor and forecast and give the impact of drought. The Emergency Drought Plan seeks to define the conditions under which a drought-induced water supply emergency exists and to specify the actions that are to be taken in response.

Legislation Review

The pieces of legislation of direct relevance to desertification include the Cultivation of Trees Act (1951), the Trees Preservation Act (1981) and the Soil Conservation (Scotland District) Act (1959). Previous studies on environmental legislation have all concluded that a more cohesive link needs to be made between the legislation as matters relating to similar issues are addressed over a number of statute areas.

ES 2. Institutional measures taken to Implement the Convention

To facilitate implementation of the UNCCD, Barbados appointed a National Focal Point and established a National Coordination Body. The Ministry of the Environment, Energy and Natural Resources was appointed as the National Focal Point and a Committee comprising members from various agencies closely associated with the issues of desertification and drought was convened by the Ministry and forms the National Coordination Body.

National Coordinating Body

The NCB acts as an advisory body and has the mandate to provide potential solutions to the problem of land degradation in the Scotland District first and foremost and to articulate and facilitate concrete actions utilizing low technology and strong community based solutions, thus empowering users towards management.

Financial resources allocated to desertification in the Ministry of the Environment are made available from the biodiversity budget. In 2000, the allocated amount is 1/10 of the allocation for biodiversity under which the programme for desertification falls. The Ministry's budget for biodiversity ranges from BDS\$12,000 to BDS\$18,000 or US\$6,000 to US\$ 9,000 annually. These funds are used for policy-related issues and public awareness. Infrastructural work falls under the Ministry of Agriculture. In the 1997-1998 budget, actual expenditure for structures was BDS\$702,145 (US\$351,072), and in 1998-1999 it was BDS\$840,601 (US\$420,300).

A work programme is currently being prepared to facilitate a more coordinated approach to the work of the NCB. The NCB currently does not have any databases of its own.

No specific national strategy or policy exists for strengthening national institutions and administrative capacity to ensure compliance with environmental laws and standards. However, under the EMLUP Study, recommendations were made to improve the environmental institutions, however, due to lack of funds or human resources these recommendations cannot be implemented.

ES 3. Consultation Process to Formulate the National Action Plan

Consultation with relevant stakeholders are held in order to facilitate the participatory approach to dealing with desertification and drought problems in Barbados. Further consultations are planned to assist in the preparation of the National Action Plan. One such consultation has already taken place in the form of a National Workshop. The UNCCD secretariat funded this workshop. The National Workshop identified three areas that were seen as requiring Action Plans and it is in these areas that the National Action Plan will focus. They are:

1. Agriculture

The relevant agencies represented at the workshop had the vision that agriculture remain a vital part of the development of the Scotland District, thus contributing towards the reduction in loss of topsoil and the prevention of land degradation. Economic activity through agriculture should be promoted so as to benefit the locals in the area.

2. Settlement

The management of settlement and associated activities as they relate to land degradation within the Scotland District needs to be addressed. The specific objectives of which would be to improve management of existing settlements, combating degradation associated with settlements and rationalizing and planning for present and future settlements.

3. Resource Use and Conservation

Conservation and appropriate use of water, arable land, sand, clay, oil, flora and fauna and people is the vision for this area. The aim is to utilize an integrated information approach based on the available body of knowledge in conjunction with consultation with stakeholders, for use in an integrated management system.

ES 4. Participatory Approach to Combating Desertification and Drought

In Barbados, much emphasis is being placed on public awareness and communication by the various sectors involved in the issues of desertification and drought.

In 1997, the National Conservation Commission agreed that a more coordinated approach should be taken regarding the planting and maintenance of trees. In an effort to increase forestation on the island, a committee was established to formulate plans on how best to involve and encourage the local people in the island-wide planting of trees. The objectives of the Committee were:

1. To establish a national day for tree planting
2. To sensitize the general public about the importance of trees
3. To encourage community groups and schools to assist in the preservation of the environment
4. To establish an education programme for schools
5. Reforestation

Water Conservation Programmes

The BWA is involved in public education programmes as they see it as an important part of any conservation programme. These programmes should be ongoing but really only take effect during the drought.

Coastal Conservation Programme

The community surrounding Barclay's Park in St. Andrew were the main participants in this effort. The project was implemented between April 1998 and March 1999. The demonstration project focused on practical solutions to the threat of dune instability.

The purpose of the project was to establish a framework for a working partnership among business enterprise, the community, NGOs and Government for sustainable use and protection of dune systems in the island, and to put this partnership to work on practical activities.

Soil Conservation Programmes

The Soil Conservation Unit is based in the Scotland District and is the main government department responsible for this area. The SCU is involved in education of farmers with respect to encouraging sustainable farming practices. These practices include teaching them to keep the soil covered, incorporation of organic matter to assist in percolation, encouraging reduction in the use of fertilizers and incorporation of the principles of Integrated Pest Management into their practices.

ES 5. Financial Resources Allocated to Combatting Desertification and Drought

Currently any monies needed are obtained from the biodiversity budget. Some monies were allocated in 1999-2000 for public awareness activities and low cost community projects. Any other projects undertaken were funded by monies obtained from the Convention secretariat. For the financial year 2000-2001, funds are allocated for public awareness from the biodiversity budget, however, it is foreseen that these will not be adequate to fully allow for the development of a comprehensive plan for implementation. Biodiversity has a total budget of BDS\$18,000 (US\$9,000) which has to be split among ten sub areas of which UNCCD is one. No money has been allocated to formulate the NAP, as this will be undertaken by the committee.

In addition to needing funding, Barbados is also lacking in some areas and requires more technical expertise. In general, personnel currently employed have experience in their various subject areas but require training in specific technical areas.

ES 6. Benchmarks and indicators utilized to measure progress

At the United Nations Summit on Environment and Development held in Rio de Janeiro in 1992, it was resolved that a core set of indicators be developed in order to measure and assess progress towards achieving sustainable development. This list of indicators comprises indicators applicable to the issue of land degradation in Barbados. These are:

1. annual rates of erosion
2. downstream siltation
3. degree of flooding,
4. extent of activities threatening erosion,
5. extent of soil conservation measures employed
6. rainfall levels.

ES 7. Conclusion

A few areas can be identified as hindering Barbados' efforts to encourage effective environmental management and in so doing fully adopt the UNCCD:

1. Lack of funding and technical expertise.
2. Lack of inter-sectoral cooperation. The efforts of environmental agencies are dispersed, there needs to be a more coordinated approach to issues pertaining to the environment. Information transfer among organizations and institutions also needs to be enhanced. A more cohesive programme needs to be encouraged among the environmental sector.
3. Insufficient incorporation of environmental considerations into development proposals by the private sector.
4. Education of the general public is not widely seen as a priority issue. It should be realised that environmental education needs to be promoted at all levels.

5. Development strategies have not given enough consideration to the limited and exhaustible nature of environmental resources.
6. The constant low priority given to environmental issues primarily due to the fact that those projects geared to bring in large economic incentives are usually those with possible negative environmental effects.

With the necessary aid, specifically monetary assistance to provide for increased human resources and project implementation, training of current staff and provision of equipment, Barbados would be well underway to implement projects geared towards mitigating the effects of desertification and implementing measures to assist in periods of drought.

BELIZE

Due to its location within the tropical region of the western hemisphere, no one in Belize considered the issue of desertification to be relevant to Belize. In fact, the almost unanimous reaction, when first made acquainted with the term, is 'Certainly not in Belize!'. However, in interpreting desertification to mean degradation of land and development of drought situations, there is general agreement that there are examples and instances of both problems in this country.

In order to determine the status of desertification in Belize, land degradation and drought situations were analysed within certain non-exclusive development sectors. There were major groupings as follows: Agriculture/Industrial; Economic and Social (including Cultural). Such an approach provides opportunities to analyse the situation at local and regional levels while incorporating multidisciplinary input. The results have not been presented in any order of priority or critical impact/risk. No exercise designed specifically to determine the locality, extent, and severity of land degradation patterns has been conducted for Belize. No human or financial resources were made available to carry out such surveys, primarily because there was no awareness about this issue in Belize. The survey could not be carried out because there were no financial resources allocated for such an exercise. The National Meteorological Service and the Department of Agriculture have both noted instances of water shortages, but again no statistical records have been maintained for analysis. The NMS has maintained rainfall data for about 30 years for some parts of the country, so some data do exist to initiate the development of baseline data. No framework had been established to institutionalize the monitoring and recording of the occurrences of drought. A methodological approach utilizing collaboration and coordination between government, civil society, and community-based organizations needs to be established to observe, record and analyse all relevant information.

This process should evolve into the formulation of the National Action Plan to Combat Desertification.

Once the range and extent of land degradation and drought cases are evaluated, priorities can be placed on developing policies and action plans aimed at mitigating the impacts of desertification and droughts.

Land Degradation in Belize has resulted from a number of developmental activities within certain sectors. The most significant changes appear to be in the Agricultural/Industrial sector. The significance of changes in land quality is due to the area affected, or due to the actual and potential environmental damage which results or can result from the activity. Within the agricultural sector, the signs of land degradation is evident in the large scale operations and in the small farming and milpa systems. Belize's economic development depends mainly on agricultural products. Sugar, citrus, and bananas are the three major crops that are cultivated. All of these are at risk of damage or unsustainability due to degradation of the land or drought. No survey has yet been conducted in order to determine the actual acreages of land that has been affected by the practices employed to obtain marketable products. Degradation in the agricultural sector can result from the repeated cultivation of one crop which depletes the nutrients, or from intensifying the use of the land beyond its productive capacity. The first is the case with large scale cultivation of crops like citrus and sugar-cane. The latter case occurs in the milpa or slash-and-burn farming systems.

There are some cases where forestry activities have also resulted in land degradation, but again this has not been quantified and recorded, and similarly is not monitored on a continuous basis. Timber harvesting activities are known to result in soil compaction and erosion, both of which equate with land degradation. Although not considered a forestry activity, but can be a consequence of such, prescribed and wildfires contribute to land degradation. Nutrients are released too rapidly during combustion of the vegetation and are lost to the atmosphere or easily leached out of the soil before being recycled into the emergent vegetation.

Mining in Belize is primarily surface removal of gravel and other material used in the construction industry or for road construction. The methodology applied is either to first scrape off the topsoil, then dig out the gravels and sands for use in house, buildings, streets and road construction and landfills. There are no efforts to rehabilitate the extraction sites or pits by replacement of the topsoil or planting trees to replenish the nutrients that have been lost. The end result is land degradation.

Droughts and water shortages are increasingly common occurrences in Belize. The cases are not epidemic as yet, but increasing demands for potable water supplies will cause concurrent increases in these situations. The growing populations and continuing agricultural expansion place higher demands on surface and underground water supplies.

Although Belize signed the Convention to Combat Desertification almost three years ago, the public is mostly unaware of the phenomenon. Development of the country has been guided by the five-year plans that the various governments have proposed upon entering office. The lack of cohesiveness among the various policies has resulted in a similar situation with most of the laws and regulations utilized for the management of the natural resources. During the last ten years, Belize has benefited from a number of bi-laterally and internationally funded projects. All have produced huge quantities of information suitable for development planning. Less than 50 per cent of such information is put to use. Similarly most of the recommendations offered are ignored.

Fortunately, improving technology in the media and communications is making the public increasingly aware of the issues affecting their future and even survival. Members of the public are organizing themselves into non-government and community-based organizations, and making their wishes known by participation in the development and implementation of projects. These groups are able to influence policy and decision-making at every level. There is increasing demand for government agencies to improve performance and to make more efficient use of the available resources. Government's activities prior to and after the launch of UNCCD is not much different. Considerable amounts of technical and financial assistance has been pumped into various sectors, but change is slow and difficult to achieve. The human resources base is also limited, so the same group of technicians and professionals tend to become involved repeatedly. This same group will again be called upon to help to develop the National Action Plan required for Belize to meet its obligations under the Convention. This process will have to continue after the submission of the Belize status report. Many recommendations have been offered to address a wide range of issues, but the main constraint is finance. Belize is a consumer and developing country, so does not generate great amounts of surplus revenue which could be channelled into the human development sector. It is only within the last two years that this sector has been given some priority. The alleviation or elimination of poverty is now of high priority for government's attention. Poverty has been determined to be the main cause of a number of the problems facing the population, including land degradation and drought. Improvements in this sector will symbiotically create improvements in other sectors. Once the basic needs are addressed, attention could be given to improving policies, laws, regulations, to reduce the duplication, and sometimes contradictory issues arising because of the interpretation of the laws.

BRAZIL

The Water Resources Secretariat of the Ministry of the Environment, in charge of conducting the National Policy on Desertification and Drought Control in the country, presents in this document a view of the desertification process occurring in the country, previous occurrences in the world and the current situation of the phenomenon in Brazil. Approximately 10 per cent of the semi-arid region, or 98,595 km², have been very seriously affected; 81,870 km², seriously affected; and 393,897 km², moderately degraded. Economic losses associated with desertification are estimated at US\$300 million per year, and the cost of reclaiming affected areas would require US\$2 billion over a 20-year period.

This document sets forth the guidelines, objectives and strategies to combat desertification, emphasizing the modern view of integration and participation of public and private entities and non-governmental organizations, as well as the communities involved, with emphasis on the information process, education and training programmes and the importance of decentralizing actions. The strategy adopted encourages investments on human resources and seeks to develop the sense of ownership required to ensure the sustainability of actions.

It is also a matter of Policies and Institutional Structuring and of the instruments that will enable the actions, highlighting the legal, institutional, economic/financial, and technical aspects. Great importance is attached to ecological/economic zoning of the territory, a necessary input in planning sustainable regional development.

In addition, this document covers various aspects of the desertification process, in terms of its actual dimension and degradation potential, the importance of environmental protection of the semi-arid, and the experience of the Water Resources Secretariat with hydrographic basins, which requires interactive and participatory procedures, as well decentralized actions, as recommended in this document.

Lastly, the preparation of the future National Plan to Combat Desertification (PNCD) is discussed, together with the most relevant themes to be considered in its design, including the strategic components, financial resources and indicators to evaluate outcomes.

COLOMBIA

The Republic of Colombia is located in the northwest corner of South America and has a northern coastline on the Atlantic Ocean and western one on the Pacific Ocean. Its continental area includes 1,141,782 km² and is entirely situated within the Inter-tropical Confluence Zone. It receives the NE and SE Trade Winds and has a population of 38,000,000 inhabitants, most of whom live in the Andean region (mountains and savannas). Colombia is divided into 34 departments, which are in turn subdivided into 1,082 municipalities.

Colombia's location within the Inter-tropical Confluence Zone, where the Pacific phenomenon popularly known as "El Niño" originates, leads to specific effects as El Niño manifests itself directly on the Colombian Pacific coast. These effects consist of higher sea surface temperatures and a higher than average sea level. This phenomenon alters the weather over the entire Colombian territory, affecting the entire natural environment in general and the water cycle in particular.

The intensity of an El Niño phenomenon depends on the magnitude of the anomalies and the area affected by same. Although it produces an impact, the intensity of "El Niño" is different from the magnitude of its effect on the weather and from its impact on human activities. The climate effect depends on the time of the year in which "El Niño" happens and the socio-economic impact has more to do with the vulnerability of the different regions of the country and the different sectors of national activity.

The past has seen "El Niño" phenomena of varying intensities. For example, the 1982-1983 event is considered to have been quite severe, while those of 1957-1958, 1965-1966, 1972-1973 and 1991-1992 were severe, and those of 1976-1978 and 1986-1987 were moderate. However, the effects on the weather and the socio-economic impact of these phenomena were not related to their intensity.

The phenomenon of "El Niño" of 1997-1998 had a direct effect on the Colombian Pacific coast, affected the climate over the entire Colombian territory and the vegetation-soil system in terms of attenuating water shortages, affected the vegetation system and succession stages and soils, and the water cycle and water supply.

The impact of the NE and SE Trade Winds coming from the northern and southern hemispheres is greatest between the months of May and September. The clash of these air flows above the Andean masses is responsible for the dual-mode and Andean-perimeter rainfall systems of the country, which tend to manifest a single-mode character.

Colombia is characterized by a variety of climates produced by different temperatures, principally due to altitude gradient and rainfall system. Annual rainfall ranges from 150-200 mm found in Caribbean regions such as the Guajira Peninsula, to over 10,000 mm in several areas of the Pacific coast region. Humidity ranges vary from sub-humid to hyper arid and from humid to super humid.

Topographical conditions (mountain chains with alternating valleys) and human settlement patterns in the mountainous regions, with the resulting pressure over the land and its natural resources, and continued deforestation as well as the advance of the agricultural frontier, with inappropriate soil and land use, have led to a soil degeneration process which is currently in progress. This soil degeneration process may be seen in the different types of erosion which accelerate the desertification process that currently characterizes several regions of the country.

These areas, along with others where climate has been a significant contributing factor to desertification processes, constitute a series of land areas in dry, semi-arid and arid sub-humid regions.

Sadly, approximately 34.7 per cent of Colombia's territory is affected by slight, moderate, severe and/or very severe erosion. It is important to note as well that the degradation process takes place in different ecosystems, a fact which should call attention to the respective national and international agencies.

For over 30 years the nation has enacted legislation on renewable natural resources and pollution prevention and control. This legislation has been reviewed and adjusted based on the social and economic needs of the nation. Important legislation includes Decree Law 2811 of 1994, the Natural Resources and Environment Code, the Political Constitution of 1991, Law 99 of 1993 which restructured the ecological and environmental sector and created the Ministry of the Environment, and the restructuring and creation of the Autonomous Regional Corporations (Corporaciones Autónomas Regionales, CARs). This environmental legislative framework constitutes the basis for all types of measures adopted and for the definition of priorities, plans, programmes and projects in combating desertification and drought, in alignment with national environmental policy.

Colombian environmental policies include the National Biodiversity Policy, Forests Policy, Policy Guidelines for Comprehensive Water Management, Strategies for a National System of Protected Natural Areas, Colombian Wildlife Environmental Management Policy, programmes and/or strategies on the management of renewable natural resources and research on same, and the policies of the Ministry of Agriculture and Rural Development, which include Technology Transfer and Research on Tropical Agriculture.

There is also the Alternative Development Plan (PLANTE), Technological Development Policy, the National System on Agroindustrial Science and Technology, Integrated Organization and Sustainable Development of Coastal Areas, Policy Guidelines on the Environmental Organization of the Territory, Clean Production Policy, Policy Guidelines on Pesticide Use and Management, Strategic Plan for the Restructuring and Creation of Forests in Colombia (Plan Verde), Plan Verde Implementation Programme 'Forests for Peace. Incentives are being considered for reforestation and forest preservation by way of the Forest Incentive Certificate (CIF - Certificado de Incentivo Forestal) and the Incentive for Rural Capitalization (ICR - Incentivo a la Capitalización Rural).

The entities in charge of the environmental sector, such as the Ministry of the Environment and its affiliated agencies such as IDEAM (Institute of Hydrology, Meteorology and Environmental Studies - Instituto de Hidrología Meteorología y de Estudios Ambientales); Alexander von Humboldt Institute for Research on Biological Resources (Instituto Alexander von Humboldt de Investigación en Recursos Biológicos); Regional Autonomous Corporations; Agustín Codazzi Geographical Research Institute; the entities in charge of research in the agricultural and animal husbandry sectors (CORPOICA and ICA); the entities in charge of land resources management, such as INAT (National Land Preparation Institute/Instituto Nacional de Adecuación de Tierras); and other government entities and, on occasion, private entities, have contributed with knowledge through their studies on dryland ecosystems and on the causes and consequences of desertification and drought processes, and have placed these studies at the disposal of communities. Likewise, in terms of the preparation of specific plans, programmes and projects, community participation processes were undertaken to identify the causes and analyze the consequences of the process, thus transforming communities into actors involved in the management and resolution of the effects they are experiencing.

However, the struggle against desertification and drought requires ample coverage in Colombia, starting with an intense awareness-raising plan at all levels geared at changing attitudes in favor of preventing and controlling desertification processes. This will facilitate inter-institutional coordination and preparation and the initiation of programmes and projects, as well as the efficient monitoring of their execution. Multilateral as well as bilateral international, technical and financial cooperation is also required, including the Global mechanism.

Implementation of the United Nations Convention to Combat Desertification and Drought (UNCCD) is of the highest importance. The First Seminar - Preparatory Workshop for the National Report of the UNCCD was held 10-11 February 2000, with the participation and support of the Regional Autonomous Corporations, including the participation of dryland areas in their jurisdictions, such as CDMB Corporation for the Defense of the Bucaramanga Pateau (Corporación de Defensa de la Meseta de Bucaramanga), CORPAMAG - Magdalena Regional Autonomous Corporation (Corporación Autónoma Regional del Magdalena), CVC - Valle del Cauca Regional Autonomous Corporation (Corporación Autónoma del Valle del Cauca), CORPOGUAJIRA - Guajira Regional Autonomous Corporation (Corporación Autónoma Regional de la Guajira), CAM - Upper Magdalena Regional Autonomous Corporation (Corporación Autónoma Regional del Alto Magdalena), CORTOLIMA - Tolima Regional Autonomous Corporation (Corporación Autónoma Regional

del Tolima), CRA - Atlántico Regional Autonomous Corporation.⁴ (Corporación Regional del Atlántico), CORANTIOQUIA - Antioquia Regional Autonomous Corporation (Corporación Autónoma Regional de Antioquia), CAR - Cundinamarca Regional Autonomous Corporation (Corporación Autónoma Regional de Cundinamarca); the Ministry of Agriculture and Rural Development and its related institutions (CORPOICA, ICA, INAT), IDEAM - the Hidrology, Meteorology and Environmental Studies Institute (Instituto de Hidrología, Meteorología y Estudios Ambientales), the IGAC 'Agustín Codazzi Geographical Institute (Instituto Geográfico Agustín Codazzi), NGOs by way of ECOFONDO, PACOFOR Project, a representative of the Tolima Indigenous Communities and different interested offices of the Ministry of the Environment. Financing is required for the activities programmed, which include the following for the current year: the awareness-raising sessions of PAN - National Action Programme (Programma de Acción Nacional), the creation of OCN - the National Coordination Body (Órgano de Coordinación Nacional) and preparation of the PAN.

Colombia's situation, with a considerable portion of its surface consisting of dry, semi-arid and arid sub-humid regions; with accelerated soil and ecosystem degeneration processes; with abundant, adequate legislation on natural resources and the environment; with long-term erosion control and erosion prevention projects; and currently re-directing its actions according to the criteria of the Convention, will require national and international financial support to implement the PAN, including its infrastructure, equipment and human resources, etc.

According to the above, during the preparation of the PAN, priority proposals are to be defined for submitted submission during the forthcoming Conference of the Parties (COP).

COSTA RICA

Costa Rica has one of the highest densities of biodiversity on Earth. Around 24 per cent of its territory is in protected areas (public or privately owned). Nevertheless, the country presently undergoes serious soil degradation problems.

The process of soil degradation in Costa Rica should be regarded integrally. Geographical, climatic, social, and cultural factors must be taken into account, as well as the impact of current agricultural development schemes and the international globalization process, which determines international exchange policies and the country's consumption patterns.

This first national report on the status of soil degradation has identified the following leading factors of degradation in Costa Rica:

- Increasing cultivation of marginal soils;
- Spontaneous appearance of small settlements in mountainous areas;
- National land ownership patterns leading to use of fragile areas;
- Badly planned, designed and operated irrigation systems;
- Insufficient enforcement of laws promoting soil and forest conservation;
- Deforestation and poor management of forest resources;
- Poor management of natural resources in watersheds;
- Extreme natural events;
- Economical policies leading to unsustainable management of natural resources.

In 1989, 20 per cent of the national territory was estimated to be severely eroded. Since then, the most critical areas have been identified. According to official accounts, 47 percent of the soils nationwide are highly prone to degradation, only 28.2 per cent are subject to appropriate use, 45.2 per cent are underused and 26.6 per cent are overused.

Some aspects of existing forest policies represent a significant effort to minimize the increased rates of degraded land surface and to promote recovery of degraded areas.

Furthermore, the Law for Soil Use, Management and Conservation was enacted in 1998. This law is intended to help protect, preserve and improve soils by means of their integrated and sustainable management along with that of other natural resources; this is to be achieved through integrated environmental promotion and planning.

The law provides the country with the regulatory and institutional framework for the design and implementation of nationwide actions to avert soil degradation, including institutional organizations and data gathering for land-use planning.

Efforts in the legal field have been followed by numerous other public actions: the identification of the most strongly affected areas, specific projects involving integrated management of some important watersheds in the country, soil studies, conservationist agriculture projects, and the prevention of emergency risk situations.

Regulations involving forest use and conservation have been accompanied by concrete actions tending to prevent and/or revert degradation processes, such as the payment for environmental services rendered by forested and reforested areas. This payment is an incentive given in exchange for the direct influence that forests and forest plantations have on protection and improvement of the local environment.

In addition, academic sectors have contributed with research and knowledge in areas such as soil and forest restoration, wetland conservation, demographic growth and unplanned urbanization. Furthermore, certain non-governmental organizations play an active role in environmental education and in analysing existing legislation.

However, only a few of these activities have been designed with an integrated view of the soil degradation problem. Most have been carried out in an uncoordinated manner and without long-term planning.

Current plans have a diminished functionality due to the lack of a nationwide coordinating agency and of a national action programme against soil degradation, as well as a financial strategy.

Another limitation is the absence of environmental education actions oriented to prevention. In addition, gender contents are usually not considered in the existing soil degradation prevention plans.

Even though participation of local communities has been important in the execution of environmental protection actions, they have been excluded from the decision-making process. Communication and awareness-raising strategies regarding this specific subject are lacking. The work of the NGOs has also been fragmentary and lacking of a global perspective.

After this first exploration of the subject, the Advisory Commission on Soil Degradation (Comisión Asesora sobre Degradación de Tierras, CADETI) shall commit itself to the development of a National Action Programme to combat soil degradation. It is expected that the necessary financial support will be provided for a wide consultation with representatives from all social groups, as well as from relevant public and private institutions. This discussion shall include the results of the First National gathering for Awareness Raising on Soil Degradation and Desertification (Primera Jornada Nacional de Sensibilización sobre Degradación y Desertificación de Tierras), carried out in January 1999, as well as the results of the workshop organized to analyse this first national report (May, 2000).

DOMINICA

In 1997, Dominica became a party to the 1996 United Nations Convention to Combat Desertification (UNCCD) - an international convention aimed at combating land degradation. This First National Report on the Implementation of the Convention was prepared by the Environmental Coordinating Unit (ECU) of the Ministry of Agriculture, Planning and the Environment. The Report will be submitted to the Convention's secretariat by 15 April 2000 as obligated by decision 13.5 of the V Regional Meeting for Latin America and the Caribbean.

In preparing the Report, preliminary research, interviews and field visits to selected sites island-wide were conducted. These activities were implemented within the framework of a multidisciplinary, multisectoral and participatory approach that embraced a great number of stakeholders including, *inter alia*, relevant Government Ministries; non-governmental organizations (NGOs); community-based organizations (CBOs); farmers; the private sector; the media; regional and international organizations and academic institutions. The results indicate that land degradation in Dominica is a serious issue that needs to be proactively, systematically and comprehensively addressed. In keeping with the Convention's definition, desertification, or land degradation, here refers to any use of the land resource that results in a decrease in its biological or economic productivity.

As such, the issues surrounding land degradation are complex and multifaceted and are at the core of concerns for sustainable development. This is particularly true for Dominica given its fragile natural environment and unique physiographic features. In this situation, attempts to exploit the limited natural resource base have created a diverse array of clearly visible land degradation problems, for example, rapid expansion of the non indigenous Citronella (lemon grass) along the west coast due to the loss of forest cover.

Notwithstanding this, Dominica has a long and rich history in its effort to address these inherent land degradation problems, protect its land resource base and find sustainable solutions to the complex land degradation problems. This is evidenced by strict legislative and regulatory policies dating back to 1898 with the enactment of the Botanical Gardens Act, to the more recent

establishment of a third National Park (Morne Diablotin) in 2000. Additionally, Dominica is widely reported as maintaining the greatest level of forest cover (66 per cent) of all of the islands in the Caribbean.

Concerning the future, it is clear that the problems of land degradation and their solutions transcend the institutional and financial capacity of traditional institutions, agencies and stakeholders. In this regard, the report recommends: (a) an assessment of existing legislative and institutional measures to determine their effectiveness in successfully combating land degradation in Dominica; and (b) mechanisms for effective coordination of the implementation of the UNCCD through revitalization of a Sustainable Development Council to advise the Government on strategic environmental management and sustainable development issues. Simultaneously, activities must occur to strengthen the Environmental Coordinating Unit to enable it to serve as the Secretariat of the Council.

In support of these initiatives and recommendations, this Report notes the inextricable linkage between the timely availability of technical and financial resources at the local, regional and international level. The successful implementation of the Convention in general and in particular the formulation and implementation of Dominica's National Action Plan are contingent upon available resources. In this regard the Global Environment Facility (GEF), the Global Mechanism and the Government of the Commonwealth of Dominica (GOCD) have been identified as major partners. Thus, a close working relationship will have to be fostered between these partners and many other concerned parties if Dominica is to adequately and comprehensively address the issues described in this Report and contained in the proposed National Action Plan. The Plan will identify several priority areas for consideration. These include the development of: (a) supporting land-use data; (b) climatological data and (c) GIS mapping capabilities. All of which will support the creation of a comprehensive National Land-Use Database to facilitate zoning and land-use planning. These activities will be juxtaposed upon an essential mass public education programme that focuses on, but is not limited to, schools, farmers, land developers/managers, other natural resource users and policy makers.

DOMINICAN REPUBLIC

The Dominican Republic is located in the middle subregion of insular America, in the great Caribbean Antilles and located between the latitudes of 17° 00 and 20° 00 North and the lengths of 68° 71" and 72° 00 West. It occupies the Eastern portion of La Española Island, and shares it with the Republic of Haiti, occupying the two third parts, with a territorial extension of 48,670.82 km² (University Geographic Institute 1992) and a population of 8.6 million inhabitants approximately. The economy of the country has been sustained in the present century, the use and intensive consumption of natural resources, as it were the forest exploitation of the 1960s, the development of an agriculture not well technified and dependent of agrochemicals, polluting agents, the development of a policy of export based on agricultural products, until the end of the 1980s and in the last years, with the development of tourism, the promotion of agro-industry and free zones.

Because of their physiographic complexity, local climatic variations appear, with annual average temperatures between 28° C in the dry low zones and down to 18° C approximately in the mountainous zones (1.300 msnm), also the rain

regime is complex, with 2,300 mm of annual average, in the rainiest zones (northeast of the country) and lowering to 450mm in the La Hoya de Enriquillo (southwestern country).

The country counts on little agricultural ground availability, only 20.3 per cent of the territory; the rest includes 24 per cent for pasture and permanent cultures; 52.7 per cent of forest and 2.5 per cent for the protection of the wildlife (United Nations National Report Conference, 1991). In spite of this, great amounts of forests have been destroyed for the agricultural activities as sugar cane and rice cultivation, the development of cattle ranches, among others.

Its been estimated that 16.7 per cent (8,055 km²) of the territory of the Dominican Republic correspond to barren and semi-arid zones (Morillo A, 1997). They are at the Southwestern region, extending from the La Hoya of the El Lago Enriquillo to Puerto Viejo, Azua, generally to less than 300 msnm. Other areas are in the northwest of the El Cibao, extending from Santiago to the border with Haiti and a small portion in the Eastern region of the country. In these zones there are the highest percentage of poor homes of the country.

STRATEGIES AND PRIORITIES ESTABLISHED WITHIN THE CONTEXT OF THE PLANS AND/OR POLICIES OF SUSTAINABLE DEVELOPMENT

The country advances in significant form on the implementation of the Convention, with the development of a group of strategies, national plans and programmes that contribute and affect the fight against desertification and drought. The plans, strategies and programmes that are developed at the present time are the following:

PLAN NACIONAL QUISQUEYA VERDE

Its objective is to improve the conditions of life of the population in the rural zones, through the promotion, handling and use of the natural resources, the generation of employment, the protection of the environment and the coordination between government institutions and the organizations of the civil society that work in favor of the sustainable development.

This Plan has a national coverture, although it prioritizes those areas that need greater attention. It has great participation by the civil society and it is executed with Government funds, contemplated in the national budget.

PROJECT FOR ENVIRONMENTAL POLITICS

This project was formulated with the objective of establishing the bases for an improved environmental handling in the Dominican Republic, through a process of learning and participation, defining reforms of environmental policies and elaborating a National Programme of Environmental Management.

This project is in its initial phase and it is financed with a loan of the World Bank. It will contribute with key investigations to design a National Programme of Environmental Management, which will be able to serve as a base for the processing of the National Plan of Action to Fight against Desertification and Drought.

PROGRAMME A 21 NACIONAL

It is an initiative of the Dominican Government for the support of the National Commission to follow-up the commitments with the United Nations Conference on Environment and Development and to generate a participative process between the public and private sector to allow to articulate the social, economic and environmental dimensions for sustainable development.

The programme's objective is the development of the institutional and technical capacities of the country, to stop the process of degradation of the environment and biodiversity by means of a process that guarantees the bases of the sustainability integrating the economic, social, scientific - technological and environmental dimensions in the planning and management of the national sustainable development, with the participation of different actors from the society. The same one has a horizon of three years, financed by the United Nations Development Programme (UNDP) and the Dominican Government.

NATIONAL PROGRAMME ON CLIMATE CHANGE

This programme is an initiative of the Dominican Government, founded by the Climate Change secretariat with GEF funds. The main programme objective is to prepare the National Communication to the United Nations Framework Convention on Climate Change, which will include greenhouse gas inventory, a country study in vulnerability and adaptation to climate change and a mitigation study. This programme is just starting and is coordinated by ONAPLAN as Focal Point of the Convention.

NATIONAL STRATEGY AND PLAN OF ACTION FOR THE CONSERVATION OF BIODIVERSITY

The strategy has the objective to assist the Dominican Republic in the preparation of its national strategy and the plan of action of conservation of biodiversity, in fulfillment to articles 6 and 8 of the Convention on biological diversity. It will identify key strategies and high-priority actions for the conservation and administration of biodiversity, in the context of sustainable development.

The Strategy and the Plan of National Action, constitute basic tools to undertake actions of Fight against Desertification and Drought since it will allow to make a better use of the biodiversity of the country. It is in its initial phase and it is executed with a donation from GEF.

SMALL SUBSIDIES PROGRAMME OF THE WORLD FUND FOR THE ENVIRONMENT (PPS/FMAM)

The objective of the project is to assure the global environmental benefits through climatic interventions in the areas of biodiversity, climatic changes and international waters with proposals based on the community, that generate local benefits.

In the next two years, the Small Subsidies Programme will support the implementation of about 25 new projects, which will be concentrated in the provinces of the border zone, which will approach the promotion of new sustainable methods of production, and ecotourism, using the resources of local biodiversity, the protection of terrestrial water-bearing sources and the use of solar paddles and hydrogenerators; like alternative of clean energy. Within

possibilities, the projects to be supported must present a strategy of how they are going to work the subject of desertification, in the execution place. In this beginning phase four focal areas have been prioritized: conservation of the biodiversity, climatic change, international waters and desertification and drought.

NATIONAL PLAN OF SOCIAL DEVELOPMENT

It is the basic instrument to give answer to the commitments assumed in the Summit of Social Development, and constitutes a reaffirmation of the Dominican Government to improve the health, employment, education, the basic cleaning, the access to potable water, the nutritional security and the possibility of having a house for all Dominicans.

The objective of the Plan is the eradication of poverty, the generation of productive employment and the promotion of solidarity. The horizon anticipated for its execution is the period 1996-2005. In order to give answers to the objectives of the Plan, the Programme Comunidad Digna and the National Plan of Feeding and Nutrition are being implemented.

NATIONAL PLAN FOR REDUCTION OF POVERTY (PROGRAMME A COMUNIDAD DIGNA)

The Programme Comunidad Digna, constitutes a assembly of cultural and social strategies of intervention, in which economic, social, political, gender, cultural and environmental factors are taken into account, as strategies that combine the generation of income and the access to public services. These strategies express the interest in orienting the social expenditure, through programmes focused in the territories where poverty predominates.

The Plan is being implemented and the financial resources come mainly from the following sources: funds assigned in the national budget to the Programme of Promotion of Social Development and funds managed by different public social institutions. The high-priority geographic areas of the programme are affected by desertification and drought.

NATIONAL PLAN OF FEEDING AND NUTRITION PLAN (NACIONAL DE ALIMENTACION Y NUTRICION (PLANAN))

It is conceived like a assembly of actions articulated to the economic and social development policies, implemented by the Dominican Government. Its main objective is to increase the levels of nutritional security in all the homes of the Dominican nation, stimulating the production of basic foods and increasing the buying and consuming capacity of the social groups.

The Plan is being executed at the moment with funds of the national budget and external resources by means of cooperation of international organisms, such as the World Food Programme.

NATIONAL STRATEGY OF ENVIRONMENTAL EDUCATION

This was developed in 1992 with the objective to put in practice the Law 295-85, (that does obligatory to introduce in the educative plans the conservation of the natural resources and the atmosphere) and for the formulation of a Plan of National Action on Environmental Education. The strategy contains

a tending assembly of actions to contribute with the formation of conscious and defender citizens of its environment.

The fundamental aspects that they are taken into account in the strategy, to reach the predicted intentions are: the policy of management, institutional aspects, the investigation and the qualification. Within the beginning of the strategy, the Project of Environmental Education in the Basic Education is executed at the present moments, which is financed by the GTZ and the Dominican Government. This project has a great importance for the country, since educating introduces the Environmental education as a transverse axis in the programmes.

INSTITUTIONAL MEASURES TO IMPLEMENT THE CONVENTION

At the present moment valuable efforts in the country are being made to create the Secretariat of State of the Environment, which will have the responsibility of the handling of the natural resources and the environment and will unify the existing institutional dispersion in the country.

Like a passage of advance to reduce the institutional dispersion, three institutions have been created at the present time that concentrate functions and unify others that were dispersed. The created institutions are: The National Institute of Environmental Protection (INPRA), with the functions to send the certification of declaration of Environmental Impact and to establish mechanisms of control, monitoring, supervision and pursuit of the contamination of the air and the water; including the coastal zones; before, during and after the execution of any public or private project, among others.

The National Institute of Forest Resources (INAREF), which unifies the Main Forest directorate and the Forest Technical National Commission, which had (both) competitions in the handling of the forests. The Main Forest directorate, that was a dependency of the Secretariat of State of the Armed Forces, with the creation of the INAREF, turns out to be a decentralized institution, which in future could be directed by a civilian.

In addition the Coordinating Commission of Natural Resources and Environment (COSERENAMA), with the purpose of establishing the bases for the creation of the Secretary of State of Natural Resources and Environment. This Commission developed and put under the Legislative chambers, a Project of General Law of Environment and Natural Resources, which introduces several principles of the convention as they are: the creation of a national fund for the environment, which will be used, to develop and to finance programmes and projects of protection, conservation, restoration, education and sustainable use of the environment and natural resources. This project of law prohibits in addition any activity that produces salinization, latinization aridification and desertification and any other activity that produces Earth degradation.

PARTICIPATIVE PROCESS IN SUPPORT TO THE PREPARATION AND IMPLEMENTATION OF THE PROGRAMMES OF NACIONAL ACTION

In the country a National Committee of fight against the Desertificación and Drought exists, which was created during the celebration of the First National Day of Awareness of the Convention, in September of 1996. This Committee is integrated by 28 institutions, of which 14 are governmental and

14 non-governmental ones. In this one the state institutions participate, the NGOs, universities, business company, professional associations, producer associations, women organizations and the national press.

At the present moment, a National Campaign of Awareness and Diffusion of the Convention is developed in the country, with ample participation of the different actors from the affected zones. This national campaign is being developed by a technical equipment of the National Committee of Desertification and Drought and within the same one in the prioritizing affected zones have been made five workshops (Santo Domingo, Mao Valverde, Barahona and La Romana) in different points from the country.

The groups selected for the accomplishment of the workshops have been the Provincial Councils of Development, for consider these as the participative institutions that exist in the provinces, since they are integrated by the provincial, municipal authorities and by representatives of the social and congressional forces of the provinces and with a multisectorial structure, that allows to make a coordinated and effective work for the application of the Convention.

PROCESS OF CONSULTATION IN SUPPORT TO THE PREPARATION AND IMPLEMENTATION OF THE PROGRAMMES OF NATIONAL ACTION AND THE AGREEMENTS OF ASSOCIATION WITH DEVELOPED COUNTRIES PARTIES AND OTHER ORGANIZATIONS

The Dominican Republic has not yet processed its National Plan of Action of Fight Against Desertification and Drought, which had not received the corresponding financing for these aims. In spite of this the country has received financing from the Secretary of the Convention, to accomplish the First National Day of Awareness and being able to submit the First National Report of Implementation of the Convention.

On the other hand the country has received financing from UNSO-PNUD, for the implementation of the National Campaign of Sensibilización and Diffusion of the Convention, which is implemented at the present moments. The Dominican Government has submitted to the secretariat two proposals, the one with the Basic Lineaments for the elaboration of the National Plan of Action, in which he asked for to the Secretary financial support and technical cooperation of some countries and a other proposal, for the accomplishment of a Bi-national Diagnosis of the Border Zone. To date this financial request has not been received.

OVERHAUL OF REFERENCE POINTS AND INDICATORS USED TO MEASURE THE PROGRESS AND EVALUATION OF THE SAME

Although the country is immersed at the moment in a dynamic process of structural changes and legal and institutional reforms of the environmental sector, it has been recognized as urgent tasks the necessity to develop national environmental indicators, and the institutional and technical definition of the capacities and coordinations that must be created to generate this information and to make a system possible of monitoring. The identification of a conceptual base and a method adapted for the selection of indicators, and of an appropriate process for the possible development of a system of monitored and pursuit is at the moment under consideration.

ECUADOR

1.1 Introduction

In Ecuador, desertification was recognized a few years ago as an environmental problem at a national level. It affects all the provinces of the Sierra and three in the Ecuadorian coast (Lugo 1995). There are no complete studies in Ecuador that analyse jointly all the main factors that cause desertification. Nevertheless, it has been estimated that 27 per cent of the countries' surface possesses an evapotranspiration potential relation precipitation that is equal or less than one, and therefore, constitutes the areas most prone to desertification (MAG/PSA 1999).

In Ecuador, the irrational exploitation of the natural resources has been the cause that for most of the practices that cause desertification to rise to high levels. According to MAG-ORSTOM (1984), almost 47.9 per cent of the country is affected by erosion problems, that is around 123.555 km². The rate of deforestation in the country is 2.3 per cent (WRI in Vásquez and Ulloa 1996), which has been the cause for the loss of 92 per cent of the vegetation cover (Sierra et al 1999). Finally, 77.8 per cent of the rural population and 44.6 per cent of the urban population of the country are under conditions of extreme poverty (INFOPLAN, 1999).

The provinces that are most affected by desertification are Manabí in the coast and Loja and Chimborazo in the Sierra and it is precisely at the provincial level where the aforementioned factors reach alarming levels. Therefore, in these provinces the vegetation cover occupies only between 25 and 30 per cent of the territory; the erosion processes affect 55 to 75 per cent of the surface and poverty affects 64 to 80 per cent of the population. The lack of productivity of the land together with the long and intense dry periods have caused 3.4 to 7.6 per cent of the populations of Loja, Manabí and Chimborazo to emigrate. These provinces are among the five provinces with the highest emigration indexes in the country. Therefore, it is precisely at this level that many efforts have been made to attack this problem even before the ratifying the Convention.

Ecuador, preoccupied with the environmental situation present in the country, participated actively in the preparation and negotiation of the CLCD, which was ratified by the Executive Power and published in the Official Register of 6 September 1995. The drafting of the National Action Plan against Desertification (PAND) started in October 1995. Since that year up to the present, the process was carried out intermittently between periods of great activity and other of none. A national political context marked by instability, incipient consolidation of an authoritative environmental policy and especially, the lack of continuous and adequate financial support, have contributed to Ecuador not being able to finalize the process of drafting the PAND. However, and in spite of all obstacles, various national governmental and non-governmental institutions have carried out great efforts to continue with the processes, among these: the Ministry of the Environment (MA), in particular the Department of International Agreements; the Ministry of Agriculture (MAG), through their Sectorial Agriculture Programme (PSA); the Ecuadorian Forestry, Natural and Protected Areas Institute (INEFAN); the University of Loja, through their Graduate Centre; the International Network of Organizations for Desertification (RIOD), in particular, EcoCiencia, the focal point of the network in the country.

This National Report follows the guidelines of the methodological guide, which may apply best under the conditions of the countries that elaborated and are executing PAND. Given that Ecuador is in the process of drafting the Plan, the answers to most of the questions in the guide refer to the preparation stage and not to the application. This report highlights the efforts made by different organizations to face the problem of desertification specifically within a broader agenda. These efforts have been carried out without considering PAND, given the problems that Ecuador faces due to desertification.

1.2 Strategies and priorities established within the context of the plans and/or policies of sustainable development

In Ecuador no specific plans or strategies have been established to combat desertification. However, there are policies that include measures to detain the practices that cause it, especially in the environmental field, and at the sectarian level, in the areas of agriculture, water resources and energy.

Ecuadorian environmental policies started to be set forth since the mid-1970s, a period in which many important laws and regulations were issued (see section 4.3 regarding the legal framework) and programmes were established, all related to environmental management. Among these, the following may be highlighted:

- Establishment of the National Programme for Soil Conservation (1980-1984) which carries out a diagnosis of the situation of the soils in Ecuador; the main erosion processes in the country are defined;
- Agenda for Development: 1993-1996 (CONADE 1993), in which a profile of the environmental problems of the country are defined and desertification is established as a national problem.

With the establishment of the Environment Advisory Committee for the President of the Republic of Ecuador (CAAM), the environmental institutionality starts to become a national strategy and policy. CAAM, promotes the process for the drafting of three fundamental elements: first, the Basic Principles for Environmental Management (approved in December 1993); second, the Basic Environmental Policies (approved in 1994), in which Ecuador establishes that it faces 11 environmental problems, among them desertification.

The third element of this process, the Ecuadorian Environmental Plan (approved in 1994) was developed by CAAM to be an operative instrument through which the implementation of policies is facilitated. As in the case of CLCD it establishes that the efficacy of environmental management depends on key factors such as: institutional, economical, science and technology, participation and education and information.

All these plans, programmes and projects were planned in 1995, unfortunately, due to the political instability in the country between 1996 and 1999 and especially due to the lack of economic resources for its financing, none of the proposals for the Fight against Desertification have been carried out.

After ratifying the CLCD, in the country four planning tools for the environmental, social and economic areas were developed. These are in chronological order, first the National Plan for Social Development (1996), which is a document drafted by the Technical Secretariat of the Social Front, whose focus is not the management of natural resources but the pressures on them. The Plan recognizes desertification as an environmental problem in the Ecuadorian coast but does not recognize its importance in the Sierra. Second, the Special Programme of Food Security of Ecuador, PESAE (1997), created on 19 October 1997, among its main actions is to support the establishment of policies and strategies for food security and the creation of a National Committee for Food Security established by institutions involved in the theme. Third, the National Strategy for Sustainable Development (1999) developed by the MA based on PAE. The strategy defines the government's general policy on themes related to the environment and sustainable development. Even though it does not define desertification as a problem, it shares the CLCD's focus, considering civil participation as a mechanism necessary for the management of different resources. Finally, the Environmental Policy for the Agriculture Sector (1999), developed by the PSA and MG considering the direct incidence that the environment has on agricultural productivity. This programme has developed a series of documents in which the agricultural situation is analysed and general policies are proposed regarding land, socio-economic factors, soil, water, agrochemicals and the general processes that directly or indirectly influence productivity.

1.3 Institutional measures taken to implement the Convention

Ecuador, as part of the process of formulating the PAND, has defined the structures and functions of the National Coordination Organ (OCN) which in Ecuador is known as the National Committee against Desertification (CLND). The themes related to legal personality, legal capacity and financial autonomy of this committee have not yet been discussed within the proposed institutional background. The CLND will be established once the drafting of the PAND is reactivated.

In the participatory workshops an institutional structure was proposed for the preparatory stage of the PAND and another one for its execution. Both structures contemplate the conformation of the CLND as the maximum coordinating organism of the Regional Committees (CRs) and the Local Committees (CLs). However, there is a proposal that for the drafting phase, a coordinator should direct the CLND supported by the Technical Secretariat. For the execution phase the Committee should be directed by the current technical focal point, the department of International Agreements of the MA, which will act as the Executive Secretariat supported by the previously established Technical Secretariat. In both cases, the secretariats will be in charge of supporting and following the application of PAND at a national and local level.

During the preparatory stage of the Plan, the CLND will have the following roles: gathering additional funds to continue with the process; gathering and analysing the information received by the Regional Committees; preparation of the first PAND proposal; and, coordination of consultative meetings and validation of the plan at the national level. During the execution it will be in charge of gathering funds for the implementation of projects and programmes at the regional level; and, the establishment of contacts for a technical and scientific exchange with scientific organizations or special guests.

The functions of the Regional Committee, during the drafting of the PAND, will be: analysis of the results of the regional workshops; selection of priority programmes and projects and the initiatives of the NGOs and local communities; preparation of programmes for regional actions. During the execution stage, they will have the following functions: systemizing experiences, investigating alternative solutions, promoting capacity-building actions, promoting dissemination actions and carrying out monitoring and evaluations.

In Ecuador, the establishment of these institutional structures was promoted during the first stage of the process of implementing the Convention; unfortunately, the lack of continuity during the process and the lack of financial support did not permit the consolidation.

The CLND will be made up of nine institutions from the governmental sector and five from the non-governmental sector that have a wide span, representation and permanence, enough resources and power of decision. Each one of these institutions will assign a permanent delegate to the committee who will have power of decision.

Various actors participated in the CRs, among these: provincial councils, municipalities, NGOs, regional corporations, indigenous organizations, the church and the representatives of the institutions that are part of the CLND. Town councils, local NGOs, grass-roots organizations, the church, among others, form the Cls.

The CLND, through the Ministry of Foreign Affairs, will have a direct relationship with the Agreement's Secretariat in order to carry out the roles mentioned in the previous numeral, especially those related to fund-raising.

Various inventories of national and regional projects related to desertification has been carried out for the drafting of PAND. A database is being developed with this information. Parallel to this effort and as part of the objective of supporting environmental management, the MA has developed a System of Information on the Environment (SIAM), which includes a database on international agreements, among these the CLCD and the Centre of Information on Biodiversity (CIBE). Other than the initiatives of the MA, there are various institutions in the country that have databases with information on different aspects related to desertification, such as: the MAG, the Office of Planning of the Presidency, ODELPLAN, the Centre of Agricultural Information of the University of Loja (CINFA); EcoCiencia Foundation in its Projects Biodiversity Conservation' and 'Paramo Conservation'; and, FAO-MAG with its Special Programme for Food Security.

The PAND proposal was drafted in August 1999, and since that date until now no development plans have been developed at the national level regarding the economic and social areas. In the environmental protection theme, Ecuador, as part of the Convention of Biological Diversity, is drafting the National Strategy on Biodiversity. For this, the focal point of the CLCD will promote working groups with the group that is responsible for the strategy in order to discuss the document proposed by PAND and define the synergies, focus and operative, among the conventions. The same process will be carried out with the group responsible for the Convention on Climate Change.

In the future, the interinstitutional structure of the CLND will allow the inclusion of the PAND guidelines in the working agenda of various governmental institutions, especially those related to planning. In order to consolidate this process, the PAND proposal includes among its lines of actions, its dissemination in various political spheres within the country. In this way, its guidelines may be included in the drafting of future national strategies.

At a subregional level, the country is supporting the establishment of a Subregional Plan of Action for the American Puna (PAS/Puna), an initiative of Peru, Bolivia, Chile, Argentina and Ecuador. The objectives of this plan are to promote research, information exchange, experiences, training and the development of policies for the conservation and management of the paramo and puna ecosystems at the subregional level.

Desertification, and specifically the factors that have caused it, have been the themes for at least ten laws in the country; among these are the Political Constitution of Ecuador and other laws for the agriculture, water and environmental management areas.

1.4 Participative process in supporting the preparation and implementation of PAND

Drafting of PAND started at the beginning of October 1995 according to the principles established by the CLCD. In order to analyse the local necessities, six regional workshops were carried out in six cities representing the countries' regions that are most affected by the process of desertification and drought. The workshops' results were processed by the Regional Coordination Committees and presented during the First National Workshop, which was carried out during 26-27 February 1997 under the coordination of INEFAN and EcoCiencia.

The regional workshops had the participation of a total of 241 representatives of a diverse group of institutions. 105 participants were present in the First National Workshop, 60 OG representatives, 15 ONGs, six indigenous communities, nine universities, four professional guilds, two from the private sector, two foreign guests and seven representatives of cooperation agencies and international projects. The Second National Workshop, for the discussion of the final draft of PAND, had 29 participants, representatives of 14 OGs, 5 ONGs, 2 international organisms, 5 grass-roots organizations and 3 from academia.

During this process, some documents and reports were disseminated to the actors and have been the base for the preparation of the first draft of the PAND document. The draft of the PAND document was disseminated among institutions, organizations and persons that had participated in the preparative process for its discussion. During the Second National Workshop comments on the document were gathered and systemized; these are described in the Memories of the Second National Workshop.

1.5 Consultative process for supporting the preparation and implementation of PAND and the association agreements with developed countries and other organisms

The first consultative process with the cooperation agencies was carried out during the First National Workshop. Seven representatives of cooperation agencies and international projects assisted. They received information on the priorities for action at the national and regional level in order to combat the desertification problem. Unfortunately, due to the diverse obstacles that have impeded the definition of PAND, no association agreements were established with the international counterparts in order to finalize the drafting process or its future application. The reactivation phase for the formulation of the Plan will include new consultative rounds that will have the general objective of guiding support from the developed countries and multilateral cooperation organisms.

1.6 Measures adopted or planned within the context of PAND, including measures to promote environmental economy, conservation of natural resources, promotion of institutional organization, improving knowledge on desertification and its control for monitoring and evaluation of desertification and drought

Diverse institutions as DINAREN (formally PRONAREG), the National Council of Water Resources, CNRH, the National Institute of Meteorology and Hydrology (INAMHI), INEFAN; CAAM, MA, Centre of Natural Resource Integrated Surveys by Remote Sensors (CLIRSEN); at the regional level, the regional corporations; at the local level, the municipalities and the provincial councils; in academia, the National University of Loja and the Universidad Laica Eloy Alfaro; have been charged with the inventory and characterization of natural resources in the country, particularly regarding soil, vegetation and water. Most of the studies carried out by these institutions, except those recently created, have information that will enable an adequate monitoring of the factors that promote desertification.

The importance of the problem of droughts and desertification at the national level, and especially their wide incidence at regional level, have given way to the development of programmes and specific projects on desertification by several governmental and non-governmental institutions or that they contemplate desertification as part of a broader agenda. Ten government institutions, 14 non-government organizations and 5 of the academic sector are carrying out projects related to the desertification. These projects approach diverse topics, among the most important: management of forest resources, agroforestry, improvement of the agricultural and cattle productivity, agroecology and irrigation. Among these initiatives, the proposal for management of the binational basin Catamayo-Chira (Ecuador-Peru) should be highlighted. This project involves management of 70 per cent of Loja, for which a consortium of 14 institutions of the Government and non-government sectors, grass-roots organizations and academic institutions has been created.

In general, all the mentioned projects include, as a central axis, capacity-building and empowerment of local organizations in order to combat desertification or the factors that cause it. Training efforts in the field of formal education have been directed by the Council of Universities and Polytechnic Schools (CONUEP), which carried out a Workshop-Seminar on Biodiversity and Desertification, in Manta in 1997. In the long term, CONUEP

plans to develop a Masters Programme of Environmental Administration with three thematic axes: Contamination, Desertification and Biodiversity. This proposal is in the fund allocation stage.

The MA, in an effort to promote the inclusion of the environmental topic in local administration, has developed, since 1997, the project Technical Assistance and Remediation of the Environment, PATRA, whose objectives are to invigorate the key institutions of environmental management from the central Government and the Municipal Governments. The Association of Municipalities of Ecuador, AME, also works towards advising the municipalities of the country for the elaboration of Local Strategic Plans. One of these components is environmental management.

The country is participating in the definition of the Subregional Plan for the American Puna, PAS/puna. In Ecuador, this proposal is directed by the MA and EcoCiencia, focal point of the RIOD, through the Working Group for Paramos, GTP, a multidisciplinary platform open to the exchange of experiences in paramo management.

1.7 Financial contributions from the national budgets to support installation, financial assistance and technical cooperation, including their affluence, processes to identify their requirements, financing areas and establishment of priorities

The theme of accessibility of the local actors to the existent financing sources is contemplated in the proposal of the PAND. The creation or definition of a specific mechanism that will guarantee financing to combat desertification in Ecuador is still under discussion. On this aspect, strategies developed by the MA that can be applied to the desertification theme, such as: the National Environment Fund (FAN), the Strategy of Bilateral Technical Cooperation and that of applying the Mechanism of Clean Development (MDL), are being studied.

In general, the process of elaboration of the PAND has not had financing that will allow processes of long-term development; on the contrary, the funds have been scarce and discontinuous. During these five years, the country has received \$41,500 for the elaboration of the PAND, which doesn't sympathize with the serious problems that the country faces in the desertification theme. Even more, most of the funds have been allocated as result of direct contacts with bilateral cooperation and not as part of the commitments of the Secretary or of the financing organisms related with the Convention. Offers of financing by FAO have existed, from a \$50,000 fund, and, from the Secretary of the Convention that promised support by financing an international consultant during one year, unfortunately these offers have not been fulfilled yet.

For the reactivation of the process it is hoped finally to have support from the financial organisms of the Convention, among these the world mechanism, that should by mandate economically support to the country's efforts to apply the Convention and to prevent or to mitigate the serious effects of desertification.

1.8 Review of the reference points and indicators used to measure the progresses and their evaluation

The development of a system of information and desertification monitoring at the national level is an aspect taken into consideration in the PAND proposal, in their line of action 2 on Science and Technology. Within this theme it is necessary to highlight the efforts carried out by other institutions in this field, activities developed without having the PAND background, given the importance of this environmental problem in the agricultural field. Such is the case of the following projects: System of Environmental Monitoring for the Agricultural Sector, developed by MAG, in particular by the Environmental Management Unit and the PSA in agreement with the DINAREN, CLIRSEN and the Interamerican Institute for the Agricultural Cooperation, IICA.

Another initiative of monitoring of desertification and drought that should be highlighted, is the one carried out by the Universidad Laica Eloy Alfaro of Manta, Manabí through their project Monitoring of the Desertification and the Drought in Manabí, which is being partially executed due to the lack of funds.

EL SALVADOR

Background

The Republic of El Salvador is located between latitudes 13' 10' and 14' 27' North and longitudes 87' 43' and 90' 08' West; it's the smallest and most densely populated country in the Latin American region. There are several ecological zones, ranging from the savannah vegetation in the central part of the country, the nebulous forests in the high parts until the mangrove forests in the coastal area. Its little territorial extension and a high population density make that the natural resources are subject to the population's growing pressure. For its location in the slope of the Pacific, it presents a regime of rains with a lingering dry season and a rainy season, which presents a decrease of precipitation for 30 days, called midsummer (canícula). This phenomenon occurs mainly in the East Zone of the country every year, where it usually causes negative impacts on the economy and regional agriculture, mainly in the production of basic grains and the production and distribution of drinkable water for different uses.

Extent and Severity of Desertification

The phenomenon of desertification in El Salvador with regard to its extent, severity and increasing rate; just as it was established by the United Nations Convention to Combat Desertification (UNCCD), is a process that still needs to be fully researched. However, in the Raising Awareness Journeys carried out, drought is recognised as an environmental problem, which is seen to a greater extent in the East Zone of the country. The most palpable evidence of this environmental problem is the gradual deterioration of soils, caused by unsustainable human activities, mainly due to ill practices of subsistence agriculture in hillsides and to the inadequate use of soil. Other indirect causes also exist, such as legal, institutional, lack of research, low educational standards and others which seen as a whole, contribute to such a deterioration. In 1985, it was estimated that 59 million metric tons of soils were lost annually by erosion, within 75 per cent of the national territory.

It really should be said that a desertification process already exists in the country, assuming that the UNCCD refers to the "deterioration of the physical, chemical and biological properties or the economic properties of soil." It is notorious that in part of the territory soils are more deteriorated in those areas where problems of drought exist. The soil loss due to erosion is a problem that has affected the country for many years.

Past National Efforts to Combat Desertification

On June 27th 1997, the Legislative Assembly of El Salvador ratified the UNCCD, and since then several efforts have been carried out to follow it up in the country. Two Raising Awareness Journeys have been carried out, one in San Salvador in 1998, Capital of the Republic, and another in the City of La Unión in 1999, in the country's East Zone. As a result of these efforts the basic inputs have been obtained that will help to draw up the National Action Plan (NAP). An Interinstitutional Committee for National Consultation has been created with representatives of different government's institutions, the private sector, a University and a non-governmental organisation which is working in following up the commitments established by the Convention. The drawing up of the National Report is another important step in the follow-up and implementation of the Convention.

Strategies and Established Priorities

The Strategic Plan of the New Alliance put forward for the 1999-2004 period is the main development instrument of the Salvadorian government; it is based on the country's reality, it contains novel positions, visions and integral solutions, an environmental component stands out aiming at human development. Basic conditions are laid down to work for the country's sustainable development where economy and nature work in a harmonious way. In the present Plan of National Development it is evident the intention of approaching the problem of degradation of lands in a more direct and effective way than before. It aims, for instance, at "implementing a policy on managing and rational use of soil to minimize its degradation and use such a resource in a sustainable way". It also sustains that the participation and decentralization process produces better projects, a more effective and democratic state and a more functional, solid and competitive market. In each one of the policies of the New Alliance, institutional programmes have been formulated that contain operative actions to be implemented starting in the year 2000. Within the environmental laws linked with the phenomenon of desertification, there are national and sectoral policies and an environmental legislation, which is indirectly related with this phenomenon, being this the most notorious characteristic in the Salvadoran legislation. There exists other plans and several institutions, which have indirect relationships with desertification and drought.

Institutional measures taken

At the moment, the Organ of National Coordination (ONC) is the Natural Heritage Direction of the Environment and Natural Resources Ministry (MARN), in charge of formulation, planning and execution of natural resources policies. The National Focal Point of the Convention of the United Nations to Combat Desertification is at the MARN offices. The Non-governmental Focal Point is the Salvadoran Centre of Appropriate Technology (CESTA). An Interinstitutional

Committee of National Consultation has been created, which depends on the Organ of National Coordination and the National Focal Point, which meets regularly. Their members are responsible to follow-up and coordinate activities for the implementation of the Convention. The financial resources of the ONC depend on the annual budget assigned to MARN; therefore, the ONC doesn't count on financial resources of its own. Only a person at MARN (the Focal Point) works in the following up of the Convention, assisting other responsibilities that are commended to him. The country still needs to take the necessary actions to form an institutional framework to control desertification in a coherent and functional way. El Salvador doesn't report progress as regard to connections or local, national links and with the other Central American countries through projects on desertification and degradation of lands which contain social, economic and environmental problems.

Legal Framework

The Political Constitution of El Salvador establishes that the International Conventions ratified by the country are secondary laws and these prevail on other laws when contradictions exist among them, therefore, they are mandatory. Besides, the Constitution establishes important provisions on environmental education, control of environmental conditions, rights of children and civil rights. Also the Environment Law and its General Regulation are in full operation, as well as the General Law of Fishing Activities, the Law of Conservation of Wild Life, the Forest Law and others which provide a legal framework for the effective implementation of the UNCCD in the country. Special measures do not exist to adapt the current legislation or to introduce new decrees to harmonize them with the principles of the UNCCD.

Participation Process

The participation process has started with the carrying out of two Raising Awareness Journeys to combat desertification, with the participation of sectors involved in the problem. The first Journey was carried out on 23-24 February 1998 in the Capital of El Salvador with an attendance of 98 people and the second in the city of La Unión (28-29 October 1999, attendance 55 people) in the East Zone. The resulting documents of both journeys were published, but it is necessary to make them available to local communities and they are basic inputs for the process of drawing up the NAP. It is considered that there are few barriers for the participation of women, since the gender approach has been spread in the country and certain awareness has been achieved. In June 1999, the Focal Point participated in activities organized during the annual celebrations of environment month, where Desertification Day is included (17 June). The information and communication activities were from person to person, radio interviews or talks to students in educational centres. The function of the Inter-institutional Committee of National Consultation of keeping informed other organisations has been initiated. There is the risk that people may lose interest and motivation when not having a continued follow-up of activities carried out.

Process of Consultation

The office of International Cooperation at MARN doesn't have projects related to desertification control with developed countries and other agencies. Therefore, there are no donor countries as yet. El Salvador is being favoured

by the technical and financial support for environment coming from abroad and there exists potential available financing sources when negotiating funds for the implementation of the Convention to Combat Desertification. No consultation and harmonization process has begun for common actions among Central American countries. The only consultations have been at national level and no work has been done outside the frontiers of El Salvador.

Adopted measures

One of the purposes of the Journeys carried out was to begin with a raising awareness process on the causes and effects of the desertification phenomenon and droughts in the country caused by unsustainable human activities and climatic variations. Also, basic information was obtained in consensus on the current state of environmental degradation in El Salvador, which can be considered in the drawing up of the NAP in the near future. In such a sense, it can be said that the process of drawing up the NAP has already begun, although it has not been concluded. The Inter-Institutional Committee is planning and coordinating the holding in El Salvador of the Sixth Regional Meeting of Latin America and the Caribbean of the UNCCD in August 2000. At the moment, the country lacks specific programmes of technical scientific training on the phenomenon of desertification. It is considered that the local capacity has not been prioritized to implement the Convention. An investigation programme is needed to concentrate on the desertification phenomenon and therefore, there are no concrete measures to increase the know-how on desertification and its control. A reason of weight that explains this situation is the lack of financial funds and of little use of the qualified human resources which exist in the country. Programmes coordinated with other Central and Latin American countries do not exist. At national level, the efforts concentrate on the capital San Salvador. No technical and scientific institutions exist at subregional, regional and international levels, which promote the issues of desertification and droughts. An important degree of responsibility is observed in the environmental NGOs, which develop projects with local communities. CESTA, as the Non-Governmental Focal Point has begun the process of drawing up an action plan to combat desertification in the East Zone and it has formed a regional team, located in the Usulután province, to assist the local environmental problems; its members will be responsible for the follow-up of the Convention in this zone. Also, a person responsible for the following up of the convention implementation has been appointed at a national level. Association agreements have not been reached with other countries of the Central American subregion, neither with other developed countries and other organizations involved in the implementation of the UNCCD.

Financial contributions

El Salvador has not yet been able to have access to public neither private financing to facilitate it to local actors. Local and international private potential sources of financing have not been explored and a National Fund to Combat Desertification has not been established or another specific account to implement the UNCCD. At government level, no decisions have been taken yet to determine a mechanism to guarantee the financing of the implementation of the UNCCD and pass to concrete actions to combat desertification and drought. Up to the present, no modalities of the diverse actors' participation in the financing and handling of activities to combat desertification have been set up. It has not been designed any strategy or plan for access to national or

international funds with the purpose of counting on resources for the financing of the NAP. The operation of the Focal Point is possible thanks to the funds of the annual budget of the MARN. El Salvador has bilateral and multilateral relationships, which have been supporting diverse initiatives and social and environmental projects. Also, the country receives financing and multilateral technical assistance from international agencies that contribute in many environmental topics. None of these relationships has given technical-financial support directly as regards to control of desertification; however, the potential exists to negotiate and to receive support for the implementation of the UNCCD. Contacts have not been made with the Global Mechanism to request funds and therefore financial support has not been received to implement the Convention. To carry out the two Raising Awareness Journeys and the drawing up and consultation of the National Report a total of \$11,000.00 was spent. The funds for these activities came from national and international sources. El Salvador has not yet formulated a plan to request technical cooperation from international agencies. The needs in technical assistance concerning the fight against desertification have not still been prioritized but the following are proposed: Technical-financial Cooperation for drawing up of the NAP, Programmes and integral projects to combat desertification, Projects to combat degradation of lands, Projects of energetical revegetation in areas affected by drought, Municipal Ordinances, Community Participation and of the private sector and others.

Revision of Indicators

El Salvador has not been able to define an appropriate methodology and a conceptual framework for the selection of indicators and parameters on desertification in the country; in order to measure and evaluate the progress achieved. In such a sense, El Salvador does not have the parameters and indicators for the programmes and projects on desertification. These will be established in the process of drawing up the NAP and they would be used in the monitoring and evaluation. Due to the initial stage in the drawing up of the NAP, no analysis can be made of impacts of the desertification phenomenon in El Salvador.

Conclusions and Recommendations

The efforts made by El Salvador as regards implementation of the Convention of the United Nations to Combat Desertification have been few but significant, due specially to lack of financial resources of its own. Among these efforts stand out: the two Raising Awareness Journeys in 1998 and 1999, the operation of the Inter-Institutional Committee of National Consultation and the drawing up of the National Report. Some of the recommendations are: Strengthening the technical-financial capacity of the Organ of National Coordination (ONC), of the National Focal Point and of the Inter-institutional Committee of National Consultation, responsible of following up the implementation of the UNCCD in El Salvador. To continue and conclude the drawing up of the National Action Plan (NAP) of El Salvador and the implementation of the UNCCD, which requires specific funds. To negotiate the technical-financial assistance of national or international agencies to carry out the necessary studies and to qualify national personnel on the phenomenon of desertification. To improve intra and interinstitutional coordination and the promotion of community participation, establishing agreements. To plan the Third Raising Awareness Journey and to promote the UNCCD content more thoroughly at all levels.

GRENADA

Introduction

The objective of this report is to inform the Conference of the Parties on the situation of the country with regard to measures taken to implement the United Nations Convention to Combat Desertification (UNCCD) at the national level. Since signing the UNCCD in 1997, Grenada has done little to implement its objectives. This situation is the result of change in responsibilities of the initial Focal Point and general lack of information about the Convention.

As part of its obligations, Grenada is required to: give priority to combating desertification and mitigating the effects of drought and allocate adequate resources. Establish strategies and priorities within the framework of sustainable development plans and/or policies to combat desertification and mitigate the effects of drought. Address the underlying causes of desertification and pay attention to socio-economic factors contributing to desertification processes. Promote awareness to facilitate the participation of local populations in efforts to combat desertification and mitigate the effects of drought. Strengthening of appropriate existing relevant legislation, enacting new laws and establish long-term policies and action programmes.

Structure and Content of Report

A National Action Plan to Combat Desertification (NAPCD) will not be a component of this report. Grenada is just beginning to implement the Convention. More time is required to consolidate public involvement and participation in the planning, design and development of a National Action Plan.

The structure and content of this report is based, in part, on recommendations from the UNCCD Regional Advisor, who visited the country in March 2000, and not fully on the guidelines provided by the UNCCD secretariat for preparing National Reports.

Data collection

Two methods were used in gathering information contained in this report, consultation with individuals and review of several past and recent references. Discussions were held with several individuals in Government Ministries and Departments, non-governmental organizations, and environmentalists. Some of the references reviewed include the Grenada Environmental Profile, National Environmental Action Plan, and National Biodiversity Strategy and Action plan.

1.1 Definition of Terms

Desertification is defined as 'land degradation in arid, semi-arid and dry sub-humid areas, resulting from various factors, including climatic variations and human activities' (Article 1(f) of the Convention). It means, reduction or loss, in arid, semi-arid and dry sub-humid areas, of the biological and or economic productivity and complexity of rain-fed cropland, irrigated cropland, or range, pasture, forest and woodlands, resulting from land uses or from a process or combination of processes, including processes arising from human activities and habitation patterns such as:

- Soil erosion caused by wind and/or water
- Deterioration of the physical, chemical and biological or economic properties of soil and Long-term loss of natural vegetation

Background on Grenada and its Land Degradation Problems

Grenada is an island developing state, which is small, relatively isolated, with limited resources and diversity, ecologically fragile and economically vulnerable (Agenda 21). It is the largest of three main islands, which make up the nation of Grenada, the other two being Carriacou and Petit Martinique.

The climate of Grenada is humid-tropical-marine, with little seasonal or diurnal variation. It is influenced by a constant northeast trade wind. In the mountainous interior, annual rainfall range from 3,750-5,000 mm and in coastal areas between 990-1,500 mm. The population is 95,597. Owing to past migration, population pressure is not an immediate environmental concern.

Grenada's forests are classified as Cloud forest (Mountain Thicket, Palm Break and Elfin Woodlands), Rain Forests and Lower Montane Forest, Deciduous Seasonal Forests and Dry Woodlands, Littoral Woodlands (scrub and cactus), and Mangrove swamps (Beard 1949).

Agriculture plays a significant role in Grenada's economy as a source of income, export earnings and employment. Contribution to GDP in the 1990s averaged 9.1 per cent. In 1987-1989, very high prices for nutmeg and mace accounted for most of the increased earnings of the sector. Value contributions have been downward since 1989 due, not only to price declines (mostly for nutmeg, and to a lesser extent cocoa), but also to production deficiencies (banana and cocoa). A marked feature of the structure of agriculture in Grenada is the preponderance of small farms holdings less than five acres represent over 88 per cent of the number of farms but occupy 31 per cent of the cultivated acreage. Farms, 5-50 acres in 1981 represented 11 per cent of total holdings and 30 per cent of total acreage. Farms over 50 acres represent less than 1 per cent of total acreage. Grenada's agriculture is highly defined between export and domestic agriculture. Within export agriculture, there are the cocoa, banana and nutmeg sub-sectors. The output of 'other crops' are being affected by the following factors - the small size unit; scattered production; low level techniques; limited availability of planting space; scarcity and cost of labour; and praedial larceny.

Grenada's economy attained a favourable growth rate of 5.8 per cent in 1998, compared with a growth rate of 4.2 per cent and 2.9 per cent for the year 1997 and 1996 respectively. The Offshore Financial sector established in 1997, showed positive growth in 1998 and is expected to continue significantly to the economy in the medium term. The economic prospect for 1999 is for an expected growth rate of 6.1 per cent and 7 per cent in the year 2000. There is no national economic policy for Grenada; however, the present administration will implement a five-point strategy for growth, equity, and poverty eradication.

1.2 Land Degradation Problems

The small size of the island limits the area available for various land use types. The natural resource base is under extreme pressure from settlement, tourism development, infrastructure, agriculture and forestry. This competing demand for the limited land area, results in land use problems, which is manifested through, deforestation and loss of biodiversity, increased soil erosion, shortage of water, decreased agricultural productivity, and coastal erosion.

Soil erosion in Grenada is a problem. Ternan & Williams, 1989, indicated that soil erosion rates are already excessive, e.g. an estimated 700 tones/rear of soil is loss from the Annandale watershed. Soil erosion results mainly from clearing on slopes too steep for agriculture, removal of vegetation and farming too close to riverbanks, and removal of trees on roadsides. The problem is not as serious on Government owned lands as it is on private lands.

Private ownership characterized the land use tenure pattern in Grenada. One of the problems of private ownership is the lack of control, which Government has over land usage. The small size of farms encourages part-time farming with inappropriate and efficient soil-conservation practices, indiscriminate use of artificial fertilizers, herbicides and pesticides. Family-type ownership of land results in further fragmentation, which further contributes to inefficient land use.

Forest loss is due mainly to the clearing of land for the production of agricultural crops and settlement. In the south, housing development is the major threat to forest loss. Tourism has emerged as a lead growth sector, and has increased demand for land for tourism and housing.

Degradation of mangrove ecosystems on the coastline of Grenada results from various activities: indiscriminate felling of trees for firewood, charcoal production, clearing for construction purposes and dumping of solid and liquid waste.

Coastal erosion is a serious problem and results from both natural and human activities. Erosion of beaches in the north and southwest of the island is most noticeable. Extensive sand mining has contributed to serious erosion at Grand Mal, Beausejour, Palmiste, Conference, Levera and Telescope beaches. The impact of the waves from 'Hurricane Lennie' caused tremendous damage to the coastlines of Grenada, Carriacou and Petit Martinique, damaging roads, buildings, and eroding soil.

Underlying Causes of Land Degradation

The visible symptoms of land degradation in Grenada is a manifestation of underlying causes, which include: lack of a land-use policy, lack of an agricultural policy, lack of coordination of land management Institutions, inadequate capacity of land management institutions, lack of enforcement of regulations and lack of public awareness.

There is no official national land-use policy or agricultural policy in Grenada, although the Ministry of Agriculture, Lands, Forestry and Fisheries (MOALFF) made several efforts to produce and implement one. The most recent

development of a sector policy and strategic plan was by the Forestry Department in 1999.

The weak institutional base for land-use management adds to the problem of land degradation. The existence of linkages, in planning and management, among institutions involved in natural resources management is weak.

Environmental legislation is outdated and hardly enforced and public awareness on environmental issue are periodic and usually the component of an externally funded project.

National Plans and strategies

The Government of Grenada, Carriacou and Petit Martinique (GOGCP) has been implementing initiatives to address environmental problems. A Country Environmental Profile was developed for (GOGCP) in 1992. The document addresses the environmental problems, constraints, and the policy directions. In 1993, a National Environmental Action Plan (NEAP) was prepared for GOGCP. The environmental priorities as outlined in the NEAP are; solid waste management, water supply and liquid waste management, land-use management, coastal zone management, water pollution, forestry and protected areas and natural hazards.

Grenada participated in the FAO Tropical Forests Action Plan (TFAP) during the 1990s. The Forestry Department, in Agriculture, Lands, Forestry and Fisheries (MOALFF), coordinated the exercise, which resulted in the development of a National Forest Action Programme (NAFAP) for Grenada.

The Government also commissioned the development of National Physical Development Plans (NFDP) for Grenada, Carriacou and Petit Martinique. The plans are intended to provide a framework for rational Utilization of the finite land resource to minimize adverse effects of socio-economic development on terrestrial, marine and atmospheric environments.

Other Plans and Strategies

Both Government and non-government institutions are currently implementing programmes, which will contribute to reducing land degradation. Some of these initiatives are listed below:

- Natural Resources Information and Management Systems Project (1994-1995);
- Rehabilitation and Strengthening of Agricultural Production and support Systems;
- OECS Agricultural Crop Diversification Project;
- Forestry Department Forest Management on Public lands Project for Grenada;
- Integrated Land Use and Forest Management Project for Carriacou;
- Establishment of a bird sanctuary at Perseverance, and a National Park at Mt. Hatman;
- OECS/NRMU Marine and Protected areas project;
- Ministry of Tourism Master Plan;
- OECS Solid and Ship generated waste Management Project;
- Base line Community Survey to assess Poverty;
- Water of Life Community Environmental Project.

National Plans and Strategies developed before the UNCCD

Several other strategies and plans were implemented Grenada, Carriacou and Petit Martinique (GCPM) before the UNCCD. These include the Physical Development Strategy, Country and Town Planning Act and Plan for of System of National Parks and Protected Areas.

National Coordination Bodies

The Government appointed National Sustainable Development Council (NSDC) and a National Steering Committee (NSC) are responsible for implementation of the UNCCD in Grenada. The NSC was commissioned by the NSDC to plan and coordinate the implementation. The focal point will work with the NSC in preparing Grenada's National Action Plan to combat land degradation.

Institutions involved in Land Management

I.2.1. The Responsibility for land use management in Grenada is dispersed among several Departments in Government Ministries: They are the Land Use Division, Lands and Surveys, Forestry and National Parks the Ministry of Health and the Environment, the National Water and Sewage Authority (NAWASA), the National Housing Authority, the Industrial Development Corporation; the Ministry of Communication and Works, and the Grenada Ports Authority

An overall assessment of these institutions reveals that there is lack of long term planning, lack of coordination in planning between departments, untrained staff, and ill defined responsibilities without clear guidance about functional relationships between agencies. No measures have yet been taken to strengthen these institutions at the local and national level to combat land degradation.

Analysis of legislation on environment and related fields

There are several legislation which are related to the environment. Some of the principal ones include:

- The Forest, Soil and Water Conservation Act, Cap. 116 (1949);
- National Parks and Protected Areas Act, Cap. 206 (1990);
- Grand Etang Forest Reserve Act, Cap. 124 (1906);
- Birds and Other Wildlife (Protection) Act, Cap.34. (1957);
- National Water and Sewage Authority Act, Cap. 208 (1991);
- Land Development Control Act, Cap. 160 (1968);
- Town and Country Planning Act, Cap. 322 (1946);
- Prohibition of Birds Exportation Act (1991);
- Noxious Weeds Act, Cap. 213 (1912);
- Protection from Disease (Plants) Act, Cap. 258 (1925);
- Land Settlement Act, Cap. 161 (1933);
- Carriacou Land Settlement and Development Act, Cap. 42 (1955);
- National Trust Act, Cap. 207 (1967);
- Public Health Act, Cap. 263. (1925);
- Slum Clearance and Housing Act, Cap. 306 (1946);
- Crown Proceedings Act, Cap. 74 (1959).

Measures to adapt current legislation or introduce new enactments

The effectiveness of environmental legislation is hindered by three factors, they are outdated, not enforced and there is little public knowledge of their existence. The Forestry Department recently coordinated a review of the Forestry and related legislation in terms of their status and deficiencies. Redrafting of New Forest legislation is expected to occur.

Financial Resources

Grenada does not have the financial resources to develop and later, implement its National Action Plan to combat land degradation. In accordance with Article 20 and 21 of the Convention, Grenada will make the effort to ensure that financial resources are available for development of an Action Plan and Programmes to combat desertification and mitigate the effects of drought.

Planned Strategies for the Development of a NAPCD

The National Steering Committee during its first meeting on 29 March 2000 drew up strategies for the development of an action plan to combat land degradation:

- Launching of an awareness programme to sensitize the public about desertification and drought;
- Establish partnerships with Land Users, Local Communities, Local Authorities;
- Government Institutions, NGOs and the Private Sector, which are engaged in or are affected by land-use management and water resources in identifying, problems, constraints and solutions;
- Establish linkages with relevant local institutions and other related initiatives to avoid duplication of effort;
- Establish partnerships with regional and international Agencies in support of the Convention to procure technical and financial assistance to developing and implementing an Action Programme to combat desertification and drought.

Some of the issues that will be addressed in the NAPCD include the following:

- Attain political awareness and support;
- Development of policies for land use and management;
- Review of existing legislation governing land use and management;
- Strengthening of appropriate institutions;
- Establishment of networks to combating land degradation;
- Development of a comprehensive Information Systems for land degradation;
- Establishment and strengthening and Early Warning Systems for land degradation;
- Expanding and Improving Education and Training;
- Promoting Public Awareness of the effects of land degradation;
- Promotion of research and extension;
- Promotion of conservation technologies;
- Formation of emergency plans to deal with the effects of drought;
- Sustainable management of forest resources;
- Food security and sustainable development and management of agricultural resources;

- Conservation and sustainable use of Biodiversity;
- Integration of land degradation programmes in national agricultural and forestry plan.

In accordance with Article 20 and 21 of the Convention, Grenada will make the effort to ensure that financial resources are available for the implementation of the NAPCD and mitigate the effects of drought. Financial support (from UNCCD/UNDP) for the preparation of the NAPCD has recently been received. No other sources of funding have yet been identified.

GUATEMALA

I. STRATEGIES AND PRIORITIES ESTABLISHED INSIDE THE CONTEXT OF THE PLANS AND/OR POLITICAL OF SUSTAINABLE DEVELOPMENT

The National Environmental Management was framed in the proposals defined by National Agenda 21, Central American Alliance for Sustainable Development, National Environmental Action Plan, the Peace Agreements undersigned 1,996 and the Environmental National Politics.

The National Agenda 21:

Generally it defines to reach the following purposes: 1. To strengthen bases that promote the implementation of a model of sustainable development, articulating the economic scenes, social, politician, cultural and environmental. 2. To Incorporate the environmental component in national plans, programmes and into project with a multisectoral interpretation. 3. To strengthen the participation and the capacities of management of the governmental entities, non-governmental and local municipal organizations in the process toward the sustainable development. 4. To prevent and mitigate the environmental contamination in all the manifestations.

On the other hand, it is planning the following strategic elements for implementation: 1. Identification of actors and groups of interest in specific problems that affect the environment and sustainable development. 2. Analysis of national problematic in multisectoral manner and participates to identify priority areas at regional and local level. 3. Formulation participatively of plans programmes and projects of short, medium and long term. 4. To incorporate both aspects in political of planning of the country. 5. To provide the general guides of action to strengthen the capacity of management of different actors of the society at national, regional, municipal and local levels.

The Central American Alliance for Sustainable Development

In 1994 the Central American Presidents approved the Central American Alliance for Sustainable Development that pursues to transform, with the complementary support of the international community, to the region in a model of sustainable development for all the planet. A region where the respect to the life in all the manifestations, the permanent improvement of the quality of life, the respect to the vitality and diversity of our earth, the peace, the democracy participates, the respect to the cultural diversity of the towns of the Central American area, are the principles that regal the future.

One of bases of the Central American Alliance for Sustainable Development constitutes the sustainable management of the natural resources and improved the environmental quality. The depletion and deterioration of the base renovates the natural resources is a problem for the future development in Central America. The contamination of the water, the air and the land have increment rapidly in the region and probably continues if no guide the current processes of development and industrialization. The principal threat radiates in the loss of forests and the decrease and deterioration of the wealthy and quality of the water, what to the time is one of the cause principals of sickness and death over in the populations. The consumption of assets and services implicated the use of resources of all type, marginal.

The Environmental National Action Plan

The Environmental Action Plan was elaborated in 1995, with the vision of formulating plans, programmes and to project that involve to all the population in order to propitiousing the interrelation of the management of the natural resources and the coherent environment with the development economic and social. Identified as principals both problems the following:

- 1) Damage of the land natural resources: deforestation, deterioration of the soil resource, reduction of hydric resources and loss of the biodiversity;
- 2) Damage of the marine-coastal resources: About exploitation and disorderly exploitation of the fished resource, loss of the mangrove and contamination of the water in the region of production coastal-marine.

The Peace Agreements

Three agreements are mentioned with major protagonists of the natural resources and the environment, these are:

- a) Agreement for the resettlement of uprooted populations by the armed confrontation.

This agreement mentions from the fixation of the principles the sustainable development, sustainable and equitable, refer to the criteria for the selection of lands: to the potential agro-ecological, price, sustainability of the natural resources reindeers and existing services. These criteria relate specifically to the production with the sustainable management of the resources.

In relation to the execution of the projects also combine aspects related to the agricultural sustainable development, the territorial settlement, the utilization of the natural resources in function of the potential to title and rights about the land and the water, use and planning of the natural resources, and infrastructure of sanitation.

- b) Agreement on the identity and right of the indigenous towns

In this agreement strengthen and enlarge the related aspects with the ambiance and the natural resources, in it related to the science and the technology mention the need of promoting technological innovation and the ethical principle of conservation of the environment. Referring to the land, it is

contemplated the need of administering of sustainable manner the natural resources that of the land depend on a proper conception of the indigenous population.

c) Agreement on socioeconomic aspects and agrarian situation

It is the agreement where mention with major insistence the related aspects with the environment and the natural resources, from a principle mention the need of promoting an integral strategy that includes: Possession of the land, use of the renovable natural resources, systems and mechanism of credit, processing and commercialization; legislation agrarian and juridical security and labour relations; technique attendance and training; sustainability of the natural resources and organization of the rural population.

As soon as to the fund of lands, is planning the promotion of the access to the property and sustainable use of the natural resources. Furthermore the development of plans of territorial settlement and the application of criteria of economic and environmental sustainability. It is planned the creation of and environmental agrarian jurisdiction within the judicial organism, by means of the emission of a corresponding law.

In relation to the access of the natural resources it is planning that for 1,999 must have granted to little and legally median organized peasants, in concessions the management of 100,000 hectare distribute them between protected areas, ecotourism, protection of fountains of water and other compatible activities with the potential and sustainable use of the natural resources.

Also establish the promotion and support to the private sector and communitary organizations of basing in projects of management and conservation of natural resources through incentives, direct localized subsidies or mechanisms of funding in conditions brandishing and point to the search of the international cooperation.

From this frame indicator of different guides that in matter of environment and natural resources must to be observed in the search of a model of sustainable coherent development with the economic and social development of the country, has planned and in some cases implementing political, strategies, plans and following programmes:

1. Agrarian and Sectorial Politics (1998-2030)

It establishes as general objective "to contribute to the improvement of the quality of life of the rural population that depended direct and indirectly of the agriculture and the natural resources, that permit to revalue the life in the field, the advance toward equity, the equalized development of the regions of the country and the decrease of the structural heterogeneusness that is the expression of the underdevelopment and poverty".

2. Forest Politics of Guatemala

It is proposed as general objective "to increase the socioeconomic benefits of the goods and generated services in the forest ecosystems and to contribute to the territorial settlement in rural lands, through the promotion of the productive management and of the conservation of the base of natural resources,

with emphasis in forest and associated resources as the biodiversity, the water and soils; incorporating increasingly the forest activity to the economy of the country in benefit of the Guatemalan society".

3. National Politics for the development of the Guatemalan System of Protected Areas Protected (SIGAP)

Which is defined as "The description of the group of principles, objectives, legal and institutional frame, lines of politics, instruments and desired situation, that State might declare, with the purpose of guaranteeing the provision of goods and services and the conservation of the biological diversity for the social and economic welfare of the settlers".

4. Environmental National Politics

It is proposed as central objective, to improve the quality of the environment and to manage adequately the natural resources of the country, inside of a frame of equitable and sustainable global development, in order to help to improve the quality of life of the Guatemalan population.

Sectorial Environmental Politicals for sectors: Agriculture, Industry, Commerce, Tourism, Petroleum and Natural Gas.

Transectorials: Biodiversity, Climate Change, Desertification, (in consultant process with diverse sectors): Waste, Air Water, Energy.

5. National Strategies for:

Biodiversity, Climate Change, Prevention and Control of Forest Fires.

6. Hydrobiological Action Plan

It is important to observe, that the term Desertification does not appears considerate as such in the context mentioned; however, the concepts and principles of the prevention, mitigation and to control of the exhaustion and the degradation of the natural resources, principally the water, the soil and the forest are considered of prior in different instruments mentioned before.

II. INSTITUTIONAL MEASURES ADOPTED FOR IMPLEMENTATION THE CONVENTION

Starting from its participation in the First Regional Meeting for Latin America on Desertification and Drought held in Buenos Aires, Argentina in February 1996, Guatemala begins the process of analysis, discussion and definition of some actions focused to the combat Desertification and the negative effects to the hydric resource and to the environment in general. At the same time are begun the steps established in the legal procedure for the subscription and adhesion of the country to the Conference of the Parties, which were achieved in April 1999.

The adhesion of Guatemala to the Conference of the Parties implicates the responsibility of the State toward the execution of the established in the same. Like first step is delegated to the National Commission of the Environment (CONAMA, entity state clerk directly of the Presidency of the Republic) like focal point of the country in front of the Convention, reporting it officially to the Executive Secretariat this national decision.

Inside the CONAMA organization, has delegated to the staff of professionals of technical attendance (instantance of direct advisor to the National Coordinator, the attention and accompaniment of Conventions of Desertification, Climate Change and Biodiversity. So in this manner, the CONAMA has assumed the role of National Coordinator Agency for the implementation of Convention of Desertification, putting to disposition the human resources, material and necessary equipment for the good fulfill.

Institutionally has an annual budget distributed as follows:

Human Resources:	Q 3,700,000.00	US \$ 47,435.00
Material and Institutional Equipment:	<u>Q 8,300,000.00</u>	<u>US \$ 1,064,102.00</u>
TOTAL:	Q 12,000,000.00 =====	US \$ 1,538,400.00 =====

As has manifested since the beginning of the present report, The Programme of National Action to Combat Desertification, has not been adopted yet officially by the government of Guatemala as a priority component of the agenda. It is important to motion that as such Convention, as same as of Climate Change other agreements and international treaties are relatively new initiatives in the concept and focus why the process of implementation has initiated with actions of information to diverse actors of the society. However, exist similar initiatives that have undertaken as by as non-governmental and governmental organizations on the plans and work programmes.

Must to be mentioned, that of the budget of the State, assigned for the functionality of CONAMA, has not assigned a specific departure for a national programme to combat Desertification. Even though has proposed the assignment of this departure for the budget of the year 2001 in forward.

III. PARTICIPATIVE PROCESS TO SUPPORT THE PREPARATION AND IMPLEMENTATION OF THE NATIONAL ACTION PROGRAMMES

The process of implementation of Convention of Desertification, initiated in 1997 by means of First National Encounter realized in Northwest and Northeast Regions of the country. This encounter had as fundamental purpose, to identify the principals causes and the effects of the degradation of the soil, concluding in that the causes of this phenomenon have the origin in the social aspects, economic and cultural, whose effects influence directly in the environmental deterioration and to the increment of the poverty. At the same time the results of this national encounter served of base to propose to the current governmental authorities the criteria for the formulation of political and national strategies to combat Desertification and mitigation of the effects of Drought.

The citizen participation, is an established commitment by means of the subscription of the Peace Agreements. Nevertheless, the process participate is still incipient, first by the fear of public expression that let the 36 years of the armed internal conflict and later by the lack of organization in the expression and proposal of the civil society, before the daily proposals of the government.

In Guatemala the communitary participation is not a new matter, since 1945 constitute legally the committees of communitary development with a focus of support to the management of the central government and the municipal governments, however these never have had an outstanding paper before proposed of both governments, turning them only in manager of conjuncture communitary actions, for example in the organization of festive days, organization of religious events, community vigilance before incidental problems, etc.

Actually in Guatemalan society, the woman plays an important paper in profit and management of the natural resources, as well as in the national economy; however, the role is not completely recognized, inclusive by the same woman. This has a direct relation with the cultural and social proper pattern of the country; since for historic the man is who had developed the economic activity, and his male conduct has relegated to the woman to a second place. Actually the woman has recovered some spacious of participation in the national life, principally in the politician aspect what has created a climate hopefully for a focus of equality of opportunities for women and men. This of course, also will transcend in the efforts of incorporating focus of type in different initiatives and national commitments, as the implementation of different Conventions, between them of desertification.

The participative focus are effective always that the communitary count with a transparent and truthful information about the problems that affect them; at the same time, the participation must create demand and disposition in the definition of proposed serious and viable.

In spite of not to be duly implemented the National System of Environmental Information (SINIA), some concrete actions have come developing, such is the case of to divulge of some political, strategies, laws, rules, etc. related with the environmental management and the natural resources. However, by the characteristics of nation pluricultural, pluriethnic, and multilanguage, in Guatemala is not so easy to design a strategy of divulging and/or general communication without taking in these consideration particularities of the country.

In the proposals of (SINIA), is considered extremely important to conform of database, no only of both aspects, but also of inventories and diagnoses of the natural resource for a certain definition of the national accounts of the environmental and cultural patrimony of the country.

IV. PROCESS OF CONSULT IN SUPPORT TO THE PREPARATION AND IMPLEMENTATION OF NATIONAL ACTION PROGRAMMES AND OF AGREEMENTS OF ASSOCIATION WITH THE DEVELOPED COUNTRIES PARTIES AND OTHER ENTITIES

As mentioned before, the process of implementation of Convention of Desertification initiate with the first national encounter in the Northwest and Northeast regions of the country, where are presented the major problems of the phenomenon. In this encounter, besides identifying the causes and effects of the desertification, was planning the urgent needs executing actions to detain the accelerated depletion of the lands of those regions.

In spite of the problem is patented at simple sight, this must be tackled in the frame of a national politics, with different strategies of implementation, and no with remoted mitigating actions and to control. In the agenda of the

current government, the theme has gone turning importance in a slow manner due to problems of major importance that according to this must to be resolved with priority.

On the other hand, the international cooperation at technical support, economic and financial level, might seem no to consider it neither in the priorities. In multiple occasions have done proposals to organisms, such as bilateral and multilateral in search of support, but up to date any results have obtained about this.

It is important to mention the support that Secretariat of Convention has offered to the national counterpart, as for the ratification as for the execution of the national encounter, and the elaboration of this national report. Attitude that not have assumed the parts or development countries members of Convention, in spite of being established as an agreement inside of the same.

In the efforts of implementation of the commitments emanated from the peace agreements undersigned on 1996 in which the recuperation of soils and degraded lands and subutilized ones, form important part, concrete actions to the respect have been planned, such is the case of the request of support proposed to the countries friends (Sweden, Norway, Spain, France, Canada and United States of America), for the protection of the basins as units of production and alimentary subsistence.

Separately the National Commission of the Environment, (CONAMA), has initiated negotiations with international organisms for the support of the management in environmental matter in which undoubtedly will be given full importance to the protection and conservation of the natural resources, principally the water, the soils and the forest.

With the purpose to promote a process of self-management, actually is working in order to conform of committees and communitary and voluntary groups for the prevention, recuperation and conservation of productive degraded areas by causes of the hydric and eolic erosion, the protection of the fountains of water and the reforestation. This initiative is carry out in coordination with municipal government and the urban and rural development departmental and regional councils.

In synthesis, has not obtained yet, the cooperation of developed countries parts, such as established in the Convention, surely because neither has proposed of punctual manner the problem in the framework of a national politics, with concrete actions from the concept of the desertification.

V. ADOPTED OR PLANNED MEASURES INSIDE OF THE CONTEXT OF NATIONAL ACTION PROGRAMMES, INCLUDING MEASURES TO PROMOTE ENVIRONMENT ECONOMIZED, TO CONSERVE NATURAL RESOURCES, TO PROMOTE INSTITUTIONAL ORGANIZATION, INCREASE THE KNOWLEDGE ABOUT DESERTIFICATION AND CONTROL FOR LABOURS OF FOLLOWING UP AND EVALUATION OF DESERTIFICATION AND DROUGHT

Upon analysing the problem of the desertification, it is necessary to consider that in the dynamics of the phenomenon, the social and economic factors have a meaningful incidence. It is probably, in the case of the problems related with the desertification, where is more evident the incidence of said factors.

Nowadays, it is recognized, that exists a clear association between situations of poverty, but yet extreme poverty, and conditions of desertification; exist evidence clear of it in, practically all the areas of the country, affected by the phenomenon of the desertification in different degrees and magnitudes. In the context of this association is that dynamic a vicious circle poverty-degradation environment-poverty, the poverty as cause and consequence of the deterioration of the natural resources.

Exist high population concentrations in relatively rural little areas, facilitating a progressive degradation of the natural resources of same areas. This situation has unchained a group of subprocesses with environmental negative impacts, migration to the cities pressuring over areas of ecological severe risk, exploitation of fragile ecosystems with surcharged demographic and deforestation enlarging the agrarian frontier.

There is in consequence a social and economic pressure over the natural resources which destruction or deterioration leads to the desertification, though the majority of the Guatemalan population, recognized and this is conscious, that to alleviate such pressure and to detain, and possibly, to revert the situations of degradation, is necessary to adopt a model of economic and social equalized and compatible development with the environmental protection; however, situations of economic and social crisis, determine priorities, that currently, favour the achievement of benefits at short term, favouring the persistence of processes of environmental transformation negative.

Some aspects of direct incidence in the desertification, according to the results of the national encounter on the theme are following: Social pressure on the land (property and tenure, availability of lands), utilization of firewood as only fountain of combustion in rural areas and urban marginal areas (massive deforestation), change of use of the land to (of agricultural or forest to cattle), overpopulation, etc.

Guatemala has experienced very few advanced meaningful in matter to combat the desertification and the drought specifically; since the political, strategies, plans, programmes and to project that of global manner and/or of separated manner have formulated in the search of a model of sustainable development for the country, not have considerate this variable as parts important to structure and operativeity. The academic entities and of investigation, as governmental as non-governmental, do not incorporate yet in the programmes and pensum of studies the theme, so that these studies serve as point of departure for the formulation of political, strategies and actions tending to the prevention and to control of the problem.

Some initiatives that have proposed up to date such the case of the Action Plan for the Forest, Action Plan for the Environment, Programme of Agricultural Development, etc. To guide the propositive actions to the conservation of the natural resources water, soil, forest, of manner individualized. It has lack a perspective of group, integrating, that considers the new conceptions of the sustainable development (economic growth, social equity and environmental conservation) and incorporates from a vision of nation the alternatives of solution to problematic given.

On the other hand, have promulgated legal texts that believe in normative instruments and also, economic, oriented to the conservation or development of the renovable natural resources to (soils, vegetation, continental waters, etc.). However, are limited or very scarce the successful results that, objectively, could to be attributed to the majority of plans, programmes and to project executed, to equal thing can be told respect to the results of the application of normative bodies and economic instruments for the management of the natural resources.

Taking as premise the prior proposals, has suggested to the current authorities of government to adopt a group of criteria over the which must to be based the operative schemes for the formulation and implementation of political and national strategies to combat the desertification and mitigation of the drought, these being:

1. To Structure of Nation Programmes of Action to combat Desertification;
2. Compatibility of political and national strategies of environment and natural resources with problematic derived of Desertification;
3. To Incorporate of economic instruments;
4. Evaluation of the phenomenon of the desertification and agroecological and socioeconomic zonification;
5. Creation and/or to consolidate of decentralized schemes and participative of management;
6. Adoption of a institutional frame for the execution of programmes of action to combat the desertification;
7. Formulation of guided programmes to the nucleus of desertification;
8. To Delimit spatial of proposals;
9. Creation of mechanisms for the technical support and financier of the national strategy to combat the desertification;
10. Implementation of the national system of environmental information.

It is necessary to mention, that since 1997 year in that was held the first meeting of the subregion (Central America, Mexico and Caribbean) in Santo Domingo, Dominican Republic, and later in March 1998 In Guatemala City, has come proposing the need of coordinating actions to level of the subregion. However,

has not achieved to concrete these ideas, by a side, because in the majority of the countries members of the subregion, still has not implemented the programmes of national action, and by other side because apparently to governments of these countries still not achieve to value the problematic existing for prioress in the contents of the agendas of work.

In view of the above-mentioned, it is indispensable to socialize with many most aggressivity Convention to level of takers of national decision, and penetrate the contents in the instances of subregional coordination as Central American Commission of Environment and Development- CCAD-, Central American Bank of Economic Integration- BCIE-, etc. At the same time, it is necessary to promote a third subregional encounter for making compatible the problematic and interests of the same, identified by means of respective national reports, and to formulate a subregional plan in agreement with the realities of this, which could be appropriate by the governments of the subregion.

VI. FINANCIAL CONTRIBUTIONS OF NATIONAL BUDGETS TO SUPPORT IMPLEMENTATION,
AS WELL AS FINANCIAL ATTENDANCE AND TECHNICAL COOPERATION, INCLUDING
AFFLUENCY PROCESSES TO IDENTIFY REQUIREMENTS, FINANCING AREAS AND
ESTABLISHMENT OF PRIORITIES

As is presented in the report, the Government of Guatemala still has not assumed of official manner in the agenda the theme of Desertification, consequently no assigns a budget for the implementation and operativity. On the other hand the external cooperation does not manifests full interest in supporting the actions tending to the prevention and/or mitigation of the effects of Desertification, possibly because has not done a concrete proposal of the problem.

Of equal manner, the parts that are developed countries neither have pronounced or shown their will of supporting technique and financially to the developing countries, such as establish in the text of Convention.

In 1999 CONAMA, owing to a diagnosis of the national and international cooperation, identified different scenes to part the which will be developed the strategy of cooperation. Between the aspects most important of this panorama cite:

1. The manner how has managed the cooperation;
2. The agreements undersigned;
3. The affectivity and operativity of the agreements undersigned;
4. Why is necessary to define a national strategy for the cooperation;
5. Objectives to reach with the cooperation;
6. The lines of cooperation (scientific, technique, financial);
7. Instances and local entities of cooperation;
8. Entities and International Organisms with who has experience in the cooperation;
9. Entities and international organisms suggested to establish cooperation.

VII. REVISION OF POINTS OF REFERENCE AND UTILIZED INDICATORS TO MEASURE THE
PROGRESSES AND EVALUATION OF SAME

As much as the National Plan for the Environment, as Environmental National Politics in the proposal value of meaningful manner the permanent evaluation of the indicators and instruments of implementation of a mark of reference. In this sense, in the context define following indicators and instruments:

1. Indicators:

a. Modernization of the management of protected areas and conservation of the biological wealth of the country;

b. Restoration and conservation of the soil and utilization of the forest resources, to improve the management in benefit of diverse regions of the national territory;

c. Integral management of the water, promoting the efficient use and sanitation;

d. Protection of the oceans and utilization rational of the resources, as well as to modernize the fished activities and related to water;

e. Improvement of the quality of the air, specially in the urban zones to protect the health of the inhabitants;

f. Rational ecological management of the solid and dangerous ecological wastes;

g. Ecological territorial settlement, to control and norm the use of the earth and the resources in a frame of certitude and knowledge for the possessors.

2. Instruments:

a. Instruments to fixed environment conditions;

b. preventive Instruments;

c. correctional Instruments.

These have as purpose to correct situations that are contributing to that the both standards are to point of being, or have been known.

Also here the plans of destined conservation to insure the capacity of regeneration and the biological diversity associated to the use and profit the natural resources. These plans of management include, between other, following both considerations: (a) maintenance of wealthy of water and conservation of soils; (b) maintenance of the landscape value; and (c) protection of species in danger of extinction, vulnerable, rare or insufficiently known.

d. Instruments of fulfilment;

e. Instruments economic;

f. Instruments of education and investigation;

g. Instruments of the citizen participation;

- h. Instruments for the generation of information;
- i. Instruments of financing.

In the frame of the environmental national legislation, established two fundamental mandates for the implementation of the mechanisms of evaluation and control of the degradation and/or deterioration of the natural resources, being these:

a) The obligation of presenting a study of evaluation of environmental impacts by part of interested, for the development of any productive activity;

b) It is conceded popular action to denounce before the authority, all done, act and omission that generates contamination and deterioration or loss of natural resources or that affects the levels of quality of life. If in the locality no exist representatives of National Commission of the Environment, the denunciation could do before the municipal authority, that will remit for the attention and procedure to the group of mention commission.

In the search of an authenticated representation and participation of the actors of the Guatemalan society in the development of the national environmental management, doing efforts by implementing a mechanism of institutional coordination and sector by means of the creation of the National System of Environmental Management (SINGA). This mechanism of coordination base in to conform of National Councils integrated by representatives of different sectors, establishing in forums of expression and debate in different areas and levels.

The SINGA, has represented, though of incipient manner the best mechanism of coordination, and proposal of the most serious alternatives of solution to national environmental problematic. This mechanism bases the operativity in the coordination with the government through CONAMA, and the materialization of the respective actions through of to municipal governments.

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