

THE STATE OF ERITREA
MINISTRY OF AGRICULTURE

**NATIONAL REPORT
ON THE IMPLEMENTATION
OF THE UNCCD**

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I. TABLE OF CONTENTS

II. EXECUTIVE SUMMARY

III. 1. The strategies and priorities established within the framework of sustainable development plans and/or policies.

- 1.1. The constitution
- 1.2. The Macro Policy
- 1.3. Water Resources
- 1.4. Private Sector
- 1.5. The National Economic Policy Framework for 1998-2000
- 1.6. The National Environmental Management Plan – NEMP-E
- 1.7. The National Biodiversity Strategy and Action Plan
- 1.8. Resettlement strategy

2. The Institutional measures taken to implement the Convention

- 2.1. The National Coordination Body
- 2.2. Technical Committee of the NAP
- 2.3. Institutional Framework for Coherent and functional desertification control
- 2.4. NAP as part of the National Economic and Social Development Plan
- 2.5. Coherent and functional legal and regulatory framework

3. The participatory process in support of the preparation and implementation of the action program

- 3.1. Participation of actors involved in defining National priorities
- 3.2. Exchange of information/awareness

4. The consultative process in support of the preparation of the NAP requirements and the partnership agreement within the Framework of the NAP

- 4.1. Regional consultative workshops
- 4.2. Partnership agreements with developed country parties

5. The measures taken or planned within the framework of the national action program including measures to improve the economic environment, to conserve natural resources, to improve institutional organization, to improve knowledge of desertification and to monitor and assess the effects of drought.

5. 1.A. Measures taken

- 5.1. Measures taken to improve the economic environment
- 5.2. Measures taken to conserve natural resources

- 5.3. Measures taken to improve institutional organization
- 5.4. Measures taken to improve knowledge on desertification
- 5.5. Measures taken to monitor and assess the effects of drought

5.1. B. Measures planned

- 5.1. Measures planned to improve the economic environment
- 5.2. Measures planned to conserve natural resources
- 5.3. Measures planned to improve institutional organization
- 5.4. Measures planned to improve knowledge on desertification
- 5.5. Measures planned to monitor and assess the effects of drought

5.1. C. Ongoing projects

5.2. Linkage achieved with Sub-Regional and Regional Action Programs (SRAP & RAP)

6. Financial allocations from national budgets in support of implementation as well as financial assistance and technical cooperation received and needed, identifying and prioritizing.

- 6.1. Adopted Financial Mechanisms
- 6.2. Mobilization of National Resources
- 6.3. Mobilization of Technical Assistance

7. A review of benchmarks and indicators utilized to measure progress and an assessment thereof.

- 7.1. Benchmarks
- 7.2. Indicators

ANNEX 1. Reference

ANNEX 2. List of abbreviations

ANNEX 3. Work plan of the NAP

INTRODUCTION

In accordance with decisions ICCD/COP (2)/5 and ICCD/COP(1)/11/Add.1, of the United Nations to Combat Desertification (UNCCD), Parties to the Convention are required to submit a national report on the progress made to implement the CCD. This national report is the first in a series that is prepared pursuant to that requirement.

This report was prepared in accordance with the detailed guideline prepared by the CCD Secretariat in the document entitled "UNCCD National Reports Help Guide". In preparing this report the views of a broad range of key actors was sought inter-alia, through a special workshop held to discuss its main content.

II. EXECUTIVE SUMMARY

1. The strategies and priorities established within the framework of sustainable development plans and/or policies

Great effort has been exerted to conduct the NAP preparation within the framework of the existing environmental policies, strategies, and plans currently available in the country. It has been encouraging to learn the existence of many enabling legislation, strategies, policies, and plans that directly relate and support the implementation of UNCCD. Prominent among the sustainable development policies and plans are the constitution, the macro-economic policy, the national biodiversity and action plan, the national economic policy framework and program for 1998-2000, forestry, animal resource, energy, water resources, private sector, resettlement, and environment strategies. The National Environment Management Plan (NEMP-E) of 1995 has been an extremely valuable document providing a wealth of facts for the preparation of the NAP. It clearly exposes the strategy, the plans, and the program envisioned by the Government to come up with the most appropriate national management of the environment.

2. The institutional measures taken to implement the Convention

The NCB aims at creating a sustainable resource use and economic development although it is aware of other organizations' roles in planning and implementing economic development programs. It is to play an active catalytic part that provides guidance and wisdom to those organizations that are directly involved in environment management.

Almost all line Ministries, public, mass, and private organizations have plans and programs that affect the environment. The most pressing issue is the establishment of harmonious interrelationships that could be achieved if all concerned are able to gauge the interdependency between their individual actions.

The National Coordination Body (NCB) is rising up to meet the challenges of creating a conducive situation where all the concerned will integrate and harmonize their plans and operations. Following the ratification of the UNCCD in August 1996, the Office of the President had nominated the Ministry of Agriculture as NCB for UNCCD. Soon the

minister of agriculture empowered the Department of Land Resources and Crop Production to spearhead the NCB by placing all the expertise resources of the Department in particular and MoA's in general at its disposal. The Director General of the Department has been appointed as the National Focal Point of the UNCCD and has established an office specifically responsible for the CCD activities. A NAP coordinator with a background in natural resources management has been employed to coordinate the implementation of CCD.

Aided by a 15 member technical committee from the most related Government, private, public, and mass organizations, participation of the local communities, and the NAP Coordinator, the NCB is in the process of preparing the NAP document.

It is most encouraging to note the remarkable degree of cooperation demonstrated by the related organizations in providing information required for the preparation of NAP. National priority information has come forth from the line ministries, the chamber of commerce, mass organizations (local NGOs), and the communities. The means employed to collect all these data consist of interface communication, consultations, meetings, and written texts.

The Technical Committee has played a major part in the collection, assessment of the write-up of issue papers, and review of draft papers of the NAP. It employs regular meetings under the chairmanship of the NFP. The committee has a work plan and avails itself of data base resources from the country and abroad. Each member of the committee, being an expert and related to environment management in own respective organization, is acting as a veritable resource person in the combat against desertification.

3. The participatory process in support of the preparation and implementation of the action program

The Government of Eritrea has taken several measures to transfer information and create awareness on desertification of the stakeholders through sensitization workshops, seminars and awareness campaigns with the active participation of the local governments, mass organizations and the Ministry of Education.

4. The consultative process in support of the preparation and implementation of the NAP and the partnership agreement with developed country Parties and other interested entities.

The NAP will be enriched by the inputs of the local communities through regional workshops to be held throughout the country to solicit the views of the people on how they perceive the factors that contribute to desertification, practical measures they envisage to address the issue and find out means on how to increase local participation and resource mobilization. Following that, a National Forum will be held with the active participation of all the stakeholders to enable them identify priorities to combat desertification.

There have been consultations made between the involved organizations as described above, however, combat of desertification being a complex task, inputs have been sought and attained from diverse sources such as UNSO/UNDP, EU, DANIDA, SOS Sahel, World Vision International, Grass Root International, FAO, CSIRO, ICRAF, DFSC, and NGOs. These have provided funds, expertise, and guidance.

5. The measures taken or planned within the Framework of the NAP, including measures to improve the economic environment, to conserve natural resources, to improve the institutional organization, to improve knowledge on desertification and to monitor and assess the effects of drought.

Several measures taken by different sectors can be considered as significant factors for the enactment of NAP. Measures were taken to improve the economic environment, to conserve natural resources, to improve the institutional organization, to improve knowledge on desertification and to monitor and assess the effects of drought. The establishment of an early warning system, introduction of integrated farming systems, and afforestation and soil and water conservation activities by the Ministry of Agriculture directly improve food security and environmental restoration. Similarly, the Department of Environment, Department of Water and the Department of Land have taken appropriate measures contributing to biodiversity conservation and development of information system, agroecological classification that can be regarded as note-worthy. The Water resources and Energy Departments have also respectively taken steps to take stock of their priorities for action by introducing alternative energy sources.

All the relevant institutions have come up with their plans of action to ameliorate prevailing conditions and improve the policy and institutional capacities for effective guidance and regulation. It is also useful to mention the positive role played by the private sector, the National Union of Eritrean Women the National Union of Eritrean Youth and Students, and the Eritrean Confederation of Workers in promoting environmental programs aimed at the combat of desertification.

The linkages achieved with sub-regional and regional action programs have mainly focused on IGAD and the Committee on Science and Technology which has contributed to awareness creation and identification of appropriate action programs.

6. Financial Allocations from national budgets in support of implementation as well as financial assistance and technical cooperation received and needed, identifying and prioritizing requirements

In addition to national financial allocations provided to all the CCD related activities described above, several projects are funded by various international organizations including UNSO/UNDP, UNCCD, IGAD, UNICEF, Heinrich Boll Foundation, World Bank, GEF, UNFPA, DANIDA, EU, SOS Sahel, FAO, NORAD, ADF, and SIDA.

It should be noted that students and communities have accomplished extensive projects in afforestation and conservation activities.

7. A review of the benchmarks and indicators utilized to measure progress and an assessment thereof.

Eritrea intends to assess the progress being made in combating desertification both through formal and informal means. The informal means include meetings, workshops and seminars, preparation reports of activities related to desertification, and yearly review mission. In addition, the Early Warning and Food Information System will provide information on the progress being made to achieve food security. The formal means will be to discuss and agree on a set of benchmarks or targets to be achieved in addressing desertification consisting of qualified and time bound targets. Another element of the NAP will be to establish indicators for the benchmarks or targets. The NAP process intends to systematize national and local reporting on measures taken to combat desertification. The format under consideration is based on analysis of measures and impacts achieved in the key areas of agriculture, energy, environment, land, major groups, and water in terms of improving the economic and social environment, improving natural resource conservation, improving institutional capacity, improving knowledge on desertification, improving the capacity to predict and mitigate drought, and improving local participation

III. 1. The strategies and priorities established within the framework of sustainable development plans and/or policies.

There exist a significant number of environmental policies, plans, and strategies that are relevant to combating desertification. Their availability provides ample ground for the preparation of the National Action Program to Combat Desertification by creating an enabling framework within which the program can be prepared. The main features and highlights are described as follows:

1.1. The Constitution

Article 10.3 of the Eritrean Constitution adopted by the National Baito (Parliament) in 1995 states: "The State shall have the responsibility to regulate all land, water and natural resources and to ensure their management in a balanced and sustainable manner in the

interest of the present and future generations and to create the right conditions for securing the participation of the people to safeguard the environment". The Article is directly relevant to the on going concern of combating desertification. It also creates a favorable climate for the development of related policies, legislature, institutions, strategies and plans.

1.2. The Macro-Policy

Adopted in 1994 as a spearhead for Eritrea's comprehensive development, the macro-economic policy document emphasizes the need for the protection and restoration of the environment. Its guiding principle adheres to a development orientation that is environmentally sustainable. In line with this guiding principle, environmental efforts are currently directed at redressing environmental imbalances and at arresting further deterioration.

1.3. Water Resources

The general policy of this sector is development of the country's water resources. It includes provision of safe, adequate and accessible water to all citizens; integrated management and fair allocation of available water resources to meet the needs of all sectors of the country; assessment, conservation, regulated utilization and quality protection (that is maintenance or enhancement) of all water resources and also the mitigation of water-related hazards; economically and environmentally sound and sustainable water resources development, according to a prioritized schedule; commitment to meeting the costs of making water available to the various users; encouragement of community awareness, empowerment (particularly of women) and ownership. The water strategy (master plan) has yet to be finalized for implementation.

1.4. Private Sector

The macro economic policy encourages participation of the private sector in the development of the country by putting in place the required policies. The private sector is encouraged to be an active partner in the combat of desertification through the proper management of the environment. The key institution in this area is the Eritrean Chamber of Commerce. Details of the measures the chamber of commerce intends to take with respect to desertification control are provided under section 7.

1.5. The National Economic Policy Framework and Program for 1998-2000

The ultimate objective of this policy framework is to reduce poverty through rehabilitation, expansion of agriculture, and environmental restoration.

Agriculture

The agricultural development strategy includes improving food security by increasing productivity through efficient use of capital, land, labor, and the restoration of the

environment. In implementing the strategy, the Government is pursuing policies that offer farmers incentives to undertake investments that improve their farming methods and raise productivity. This is reinforced with the construction of water and soil conservation facilities, research on farming methods, introduction and use of modern inputs, an affective extension and training program, and improved access to credit, storage and marketing facilities. Agricultural development efforts are also based on appropriate land use planning to reduce land degradation.

Land

The objectives of the land policy are to establish a revised system that encourages long-term investments in agriculture and prudent environmental management.

Forestry and wildlife

Much of the forest cover of Eritrea and nearly all its wildlife have suffered great losses. In order to restore forest cover and reestablish viable wildlife populations the Government has set in motion a number of strategies and policies. The concrete measures and steps underway or envisaged in this area are described under section 7.

Animal Resources

The Government's strategy is increasing the livestock productivity by introducing effective rangeland management and improving the quality and availability of feed, expanding veterinary services and introduction of improved breeding system.

Energy

The priority of the Energy sector is to develop viable alternative energy supply sources for Eritrea to promote cost-effective energy utilization and conservation, and to protect the environment. To achieve these objectives the following strategies and policies were formulated:

- Promoting economically and environmentally sound energy sector development through the application of appropriate technology of energy production, conservation and usage optimization. Implementing appropriate energy pricing structures that avoid all forms of subsidy.
- Diversifying sources of energy in order to minimize the strategic dependence on the dwindling biomass energy resources and imported oil by way of promoting private capital participation in hydrocarbon exploration and developing renewable energy resources potential.
- Modernizing and expanding the country's power generation and distribution system and creating enabling situation for private participation in energy development and market.

- Developing capacity through training and establishment of the necessary legal and institutional framework in order to competently manage the sector.

Environment

As part of its overall development strategy, the Government is committed to establish sound environmental standards by taking the necessary steps to introduce sustainable management practices in land use, forest, air quality, wildlife and water resources. The Government has established a new organization, the Ministry of Land, Water and Environment, which, in collaboration with the relevant agencies of Government and the private sector, is developing standards, and taking steps to ensure that environmentally sustainable practices are pursued. The Ministry is developing policies and strategies that do not only protect the environment, but also to restore and enhance it.

Tourism Sector

The efforts that are being launched to expand tourism services are being implemented with appreciation of the need to preserve and enhance Eritrea's environmental resources. Eco-tourism is strictly followed as policy guideline.

1.6. The National Environmental Management Plan (NEMP-E) (1995)

The National Environmental Management Plan is the blueprint for coordinating the protection and enhancement of Eritrea's natural resources, so that optimal social and economic developments can be achieved in consonance with the rational and sustainable use of resources for current as well as future generations.

The NEMP-E contains a chapter directly relevant to land degradation in section B.2 under the title "Land and Soils". Priorities listed under this title are:

- Arresting land degradation, particularly for arable land,
- Increasing public awareness about land degradation,
- Increasing soil cover by a variety of means and techniques,
- Empowering farmers to improve farming methods and land husbandry,
- Implementing the environmental aspects of the Land Law,
- Preparation of a National Action Program to combat desertification (currently being implemented), and
- Preparation of a national soil policy

In section C of the NEMP-E, specific programs and projects that aim at strengthening management of the land and minimize land degradation have been identified. These include:

- Land development master plan,
- Soil fertility conservation: environmentally sound methods,
- Improvement of rangeland management,

- Preparation of guidelines for land classification,
- Environmental information, education and training,
- Supporting national resource information center, and
- Supporting soil and water conservation research,

Additionally, the NEMP-E incorporates natural resource and management issues that have impact on land degradation. The major issues appear under the chapters of water, forest resources, natural heritage and biological diversity, coastal and marine resources, energy, and mining and mineral.

1.7. The National Biodiversity Strategy and Action Plan

The Department of Environment in collaboration with relevant Government institutions such as the Ministry of Local Government, Ministry of Agriculture, Ministry of Fisheries, University of Asmara and others is developing the National Biodiversity Strategy and Action Plan (NBSAP). It focuses on the rehabilitation of degraded terrestrial and marine ecosystems and their components through the establishment, management and sustainable use of natural resources. The multi-sectoral draft study covers policy, institutional, legal, technological and resource aspects that would bring about a careful regulation of biodiversity.

1.8. Resettlement strategy

Following the Eritrean independence in 1991 a large number of citizens who were refugees in the neighboring countries began to return home. In accommodating the thousands of returnees, the Government institution entrusted with the task, the Eritrean Relief and Rehabilitation Commission (ERREC), established resettlement policies and strategies that took due regard of environment concerns. Settlements were located in areas where the carrying capacity of natural ecosystems could sustain a large influx of additional people. In this regard the provision of water and sanitation, energy were considered as carefully as possible.

The extraction and use of building materials for building housing for the returnees was a major challenge. Here again the concern was to develop housing plans that would utilize scarce building materials frugally, and where appropriate to build using replenishable renewable materials.

2. Institutional measures taken to implement the Convention

Several government, public, community, and private organizations can be described as institutions related to the combat of desertification. They can also be strengthened to embrace the program in a more harmonious and coherent manner in order to be result oriented.

2.1. The National Coordination Body (NCB)

Following the ratification of the UNCCD in August 1996, Eritrea has been working towards the implementation of desertification measures. These include the appointment of a focal point for CCD matters within the Ministry of Agriculture. The Office of the President of the State of Eritrea officially nominated the Ministry of Agriculture as the National Coordinating body of UNCCD. The Minister of Agriculture, through the trusteeship entrusted upon him, nominated the Department of Land Resources and Crop Production to spearhead the National Coordinating Body (NCB). The NCB utilizes the existing resources of the department in particular and MoA's in general.

The Director General of this Department has been appointed as the National Focal Point (NFP) of the UNCCD. The mandate of the department is to plan and implement activities related to combating desertification together with the staff in the Regions. The functioning of the NCB is financed by the Government and has financial autonomy for the implementation of its activities.

The NCB has recently established an office specifically and entirely responsible for the CCD activities. A NAP coordinator with a background in natural resource management was employed to coordinate the implementation of CCD activities. The coordinator, in collaboration with the focal person, runs the office. UNSO/UNDP has covered some of the costs of the CCD coordinator's office. The Government's contributions include administrative support, facilities, and expertise. The office is currently involved in the preparation of the National Action Program (NAP) to combat desertification and is planned to continue as a monitoring and evaluation office of CCD activities.

2.2. Technical Committee of the NAP.

A technical committee composed of 15 members has been established to prepare the NAP document. The members of the Technical committee and the principal partners in the formulation of the NAP are Government agencies such as the Ministry of Agriculture, Ministry of Land, Water and Environment, Ministry of Education, Ministry of Mining and Energy, the Ministry of Local Government and the Chamber of Commerce representing the private sector. Mass organizations such as the National Union of Eritrean Youth and Students (NUEYS), the National Union of Eritrean Women and (NUEW) and the Confederation of Eritrean Workers are also members of the technical committee.

The procedures and steps being followed in preparing the NAP are:

- Preparation of issue papers.
- Sectoral consultation (workshop) to discuss the issue papers. A workshop was held in May 17-18,1999 to discuss and enrich the issue papers. The issue papers were presented by the technical committee and thoroughly discussed. Participants included representatives of the relevant sectors, UNDP, FAO, DANIDA, University of Asmara, the regional MoA offices, and international and local NGOs
- Regional consultations (workshops) with the local communities.
- National forum.
- Adoption of the NAP.

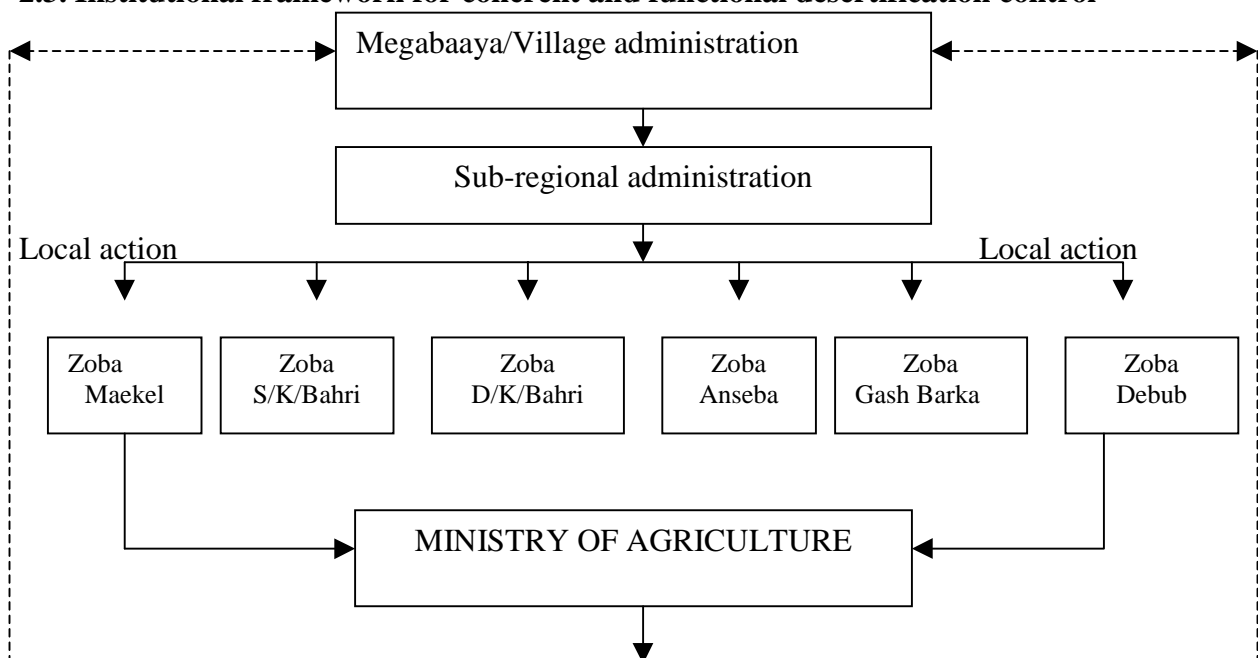
The technical committee is responsible for writing issue papers of the NAP and holds regular meetings under the chairmanship of the NFP to discuss the progress of the write-up of the NAP issue papers, and to discuss and review draft texts of the same. The committee cooperates through exchange of materials and expertise. The work of the technical committee is supervised by the NCB and evaluated by the committee itself. The committee has a work plan and timetable for its activities. Each of the members of the technical committee is responsible for writing issue papers relevant to combating desertification in consultation with the institutions they represent and the main stakeholders.

The office of the NFP and the coordinator of the CCD are equipped with e-mail, fax and a reference library. Access to any information, reference materials, and database in the different sectors of the country is possible. The NCB maintains reference material on desertification in its library and receives books, journals, magazines, bulletin, pamphlets, survey reports, decisions and resolutions of the General Assembly, and reports from the Conference of the Parties (COP 1 & 2).

The office of the NFP can access the following database relevant to desertification.

- Agromet Update decadal bulletin on rainfall data and vegetation situation in Eritrea.
- Monthly Food Outlook bulletin. It contains data on the monthly rainfall, Agricultural situation, Livestock situation, Vulnerable groups, Nutrition, Price situation, and Ambeta Box containing the Desert Locust Situation Report in Eritrea.
- Land degradation case study
- Environmental information system including GIS outputs related to environment
- Meta Data consisting of information about location of reference materials on environment existing in the different sectors
- Eritrea Biodiversity Stock-taking assessment report
- National Data Bank of the Meteorology (Civil Aviation) consisting of rain-gauge, wind speed, and wind direction data.
- Long term rainfall trend of Eritrea.

2.3. Institutional framework for coherent and functional desertification control



The diagram presented above presents graphically the institutional framework that Eritrea has established for desertification control. Several key points need emphasis:

Firstly, the framework recognizes the bottom up approach. The definition of factors leading to desertification and the necessary measures required to arrest or reverse them is done starting from the lowest local level, that is the village administrations (Megabaayas).

The technical support for the definition of factors and the measures required to address them is provided by a set of institutions mentioned in the diagram and already described in this section, that is the MoA, NCB, NFP, the technical committee, the regional consultations (workshops) and the National forum.

Secondly, coordination of actions is ensured by the institutions mentioned above. The regular meetings of the technical committee and the NCB provide the necessary coordination. In addition, frequent consultations with the people at the zoba (regions) provide the necessary feedback to ensure coordination.

Thirdly, the framework has been established to make sure that the NAP is reviewed and assessed periodically. Eritrea considers the NAP as a process that must be constantly reviewed and updated. The feedback mechanism is showed in the diagram.

Fourthly, actions to combat desertification have been taken and are being taken through the collaborative efforts of different sectors of the country. The setting up of the new local government structure has principally encouraged the participation of local communities in the identification, preparation and management of development programs. The new organizational set up has laid a good foundation for the concerted actions of local communities in environmental protection. In the prevailing administrative structure, there are committees made up of village representatives responsible for overlooking the implementation of sectoral plans at the lowest level of administration although their establishment is not finalized in all village administrations.

2.4. NAP as Part of the National Economic and Social Development Plan

The most authoritative articulation of Eritrea's economic and social development policy is contained in the Macro Policy paper of 1994. As stated earlier in section 3 under "Strategies and priorities established within the framework of sustainable development plans and/or policies", the NAP is being developed as a coherent part of the Macro Policy and Development Plan.

Another relevant National policy for desertification is the "National Economic Policy Framework and Program, 1998-2000". That document has already been mentioned under section 3. The NAP will be elaborated with due regard to the policy framework.

2.5. Coherent and functional legal and regulatory framework

The Government has taken legislative measures on issues relevant to desertification. The following are some of the existing legislations directly relevant to desertification.

- ◆ The Land Proclamation Law No. 58/1994

Eritrea's environmental problems are directly related to land degradation, deforestation and soil loss. The traditional land tenure system is one of the main factors that led to the advancement of soil erosion and deforestation leading to the expansion of desertification in Eritrea.

The traditional land tenure system has been inadequate in promoting sound environmental management practices and sustainable agricultural development. This system discouraged permanent improvement of land and encouraged the pursuit of short-term gains. This led to severe soil depletion and deforestation of the country. In order to arrest the further deterioration of land and to improve land use, the Government promulgated a comprehensive land reform law in 1994. This law invests ownership of land to the Government while at the same time asserts the right of use of land throughout the lifetime of the citizen. The Government will allocate land fairly and equitably, without discrimination on the basis of race, religion, gender or national origin. The new law is expected to confirm and reinforce security of tenure and thus increase the impetus for environmental protection such as planting trees and building terraces against erosion. It will pave the way for the introduction of proper land use planning process at different levels.

The new law is expected to encourage long-term improvement of the land. It will permit the classification and allocation of land on a more rational and scientific basis, avoiding excessive fragmentation, and ensuring the establishment of appropriately sized reserves and wood lots, grazing, and communal, housing and urban facilities. Implementation of the new law is in its initial stage because of lack of an integrated national policy regarding land use. However, settlement areas and agricultural land have been allocated.

- ◆ The draft National Environmental Legislation was prepared in 1996 in which the role and place of biodiversity is recognized, particularly the principles for the sustainable management of natural resources. It is the most authoritative legal document governing environmental management issues in Eritrea. The draft is currently being revised to include community participation
- ◆ The draft National Biodiversity Legislation was prepared in 1996 setting out the legal framework for conservation and sustainable use of natural resources. It contains in its different sections provisions for area based and species based conservation of biodiversity, access to genetic resources, education, information, training and research, and the institutional mechanisms to deal with conservation of biodiversity.
- ◆ Forestry and Wildlife legislation (draft) Based on the Macro Policy of the State of Eritrea, draft legislation on Forest and Wildlife Conservation and Development was

prepared in 1996 to replace the pre-existing policy and associated rules and legislation inherited from the Ethiopian Government.

- ◆ Proclamation for the Establishment of Regional Administrations No. 86/1996 was issued with an aim of introducing a decentralized administrative system to ensure a greater involvement and responsibility of local populations. To consolidate the development efforts of the grass roots and increase community participation in development matters, the local governments have been restructured into six regions, 57 sub-regions and 654 village administrations base on the proclamation. Each regional administration has a regional administration, sub-regional administration and the lowest level, village/area administration. The line ministries are accountable to the regional administrations. Each local government is responsible for developing adequate administrative facilities and design plans; development programs and projects which are consistent with the national plans and that will enhance social and economic conditions of the people.

The regional administrations are currently playing a role in ensuring the active participation of communities in local affairs and encouraging local initiatives that guarantee the introduction of gradual decentralization and sustainable development.

3. Participatory process in support of the preparation and implementation of the action program.

3. 1. Effective participation of actors involved in defining national priorities.

The main idea behind the need for participation is to increase the effectiveness and sustainability of development interventions. With community participation, programs are based on better information and address their needs. The prevailing local frame work or grass roots organization, the village administrations organized by the local governments are bolstering community participation.

The role of local governments in protecting and managing the environment is largely contained in increasing the awareness of the local communities on the need of environmental protection and management, encouraging communities to protect the environment and mobilizing local communities efforts and resources.

The above mentioned legislations have been formulated with the participation of a wide range of participants including the local communities who participated in workshops organized to discuss the legislations.

As mentioned previously, the NAP is under preparation by a technical committee. The technical committee as one of its resources has used the NEMP-E document that had gone through an extensive participatory process in its preparation. The draft issue papers prepared by the technical committee of the NAP have been translated into the national language for discussion with the local populations. As has been the case in the NEMP-E

preparatory process, the NAP will be enriched by the inputs of the local communities through regional workshops to be held throughout the country. A National Forum with the active participation of all the stakeholders will further enable the stakeholders to identify priorities for combating desertification.

Gender focus

Participation of women in all the stages of the preparation will be encouraged mainly because the proclamation to establish regional administrations (Article 10), reserves 30% of the total seats in a Baito. The fact that women are entitled to own land will also increase their active participation.

3 .2. Exchange of information

Exchange and transfer of information is an imperative step towards combating desertification. To this effect the following measures were taken by the Government to ensure that information on desertification will reach all the stakeholders and to raise their awareness on desertification.

- ❖ A National workshop on sensitization of the international Convention to Combat Desertification was held in August 8-10, 1994 in Asmara to create awareness of the just concluded, and to start drawing up strategies for follow up at national and sub-regional levels and prepare for the signing ceremony and sixth session.
- ❖ “A National Desertification Information and Awareness Day” was held on April 20-21, 1995 in Asmara to make the public aware of the problems of desertification and its consequences. In addition, the National Union of Eritrean Youth (NUEYS), the National Union of Eritrean Women (NUEW) and the National Confederation of Eritrean Workers (NCEW) undertake awareness campaigns on environmental issues.
- ❖ In October 1995, a meeting of relevant Government and international organization personnel was also held to introduce the concept of the National Action Program and discuss its formulation. The Eritrean Agency for the Environment, Ministry of Agriculture, Land commission, the resident representatives of FAO and the World Food program, and the World Bank were represented.
- ❖ A special newsletter on land degradation with 12 special articles on various aspects of desertification was prepared and was widely distributed. Audio-visual presentations were also undertaken on TV.
- ❖ Seminars were held in 1995 and 1996 across the country in all the provinces. Participants included farmers, elders and Government officials. In addition special seminars were held in the 6 zones to help organize the “Peoples Forum on the Environment”. A fundamental element of the Forum is consensus building mechanism where representative samples of the population meet to discuss and decide on environmental issues affecting the people. Stakeholders met at village, sub-

district, district, and national level.

- ❖ To incorporate the scientific component to the public consultations, key national scientific research institutions were approached. The institutions included in this initiative were the University of Asmara's Department of Geography, Faculty of Natural Science, Faculty of Agriculture and the University's Institute of Development Research along with the Agricultural Research Center of the Ministry of Agriculture.
- ❖ A Sensitization Workshop for the Private Sector was held in 24-26 March 1998 to encourage the participation of the private sector in the preparation as well as implementation of the NAP. The workshop was held in collaboration with the Eritrean Chamber of Commerce and IGAD.
- ❖ In addition to the above mentioned awareness building measures, the Ministry of Education is undertaking various work programs. The following are the major areas of involvement of the Ministry.
 - Environmental education in schools has been placed among the priorities of the curriculum work. So far, the topic has been treated as a multidisciplinary theme in schools at all levels from grade 4 to 11. Lessons are included in student syllabus and the contents include global environmental issues at primary level and national environmental concerns at secondary level.
 - The Ministry of Education's adult education program is implemented with the help of the Ministry of Information and includes learning situations aimed at raising awareness of adults who lack environmental knowledge. The program is broadcast on the radio in the languages of the country like Tigigna and Tigre and reaches a wide range of stakeholders.
 - Parallel to the awareness raising programs and activities, pilot projects have already been introduced in some school activities to engage students in environmental clubs and school afforestation programs. Such involvement of students is potentially significant in environmental education and can help to evaluate whether the message transmitted is effectively carried out.

4. Consultative process in support of the preparation of the NAP and the partnership agreements with the developed country parties and other interested entities

4.1. Regional consultative workshops

Issue papers of the NAP prepared by the Technical Committee have been translated to the local languages for discussion with the communities in the regional consultative workshops that will be held in support of NAP. The main objective of these consultations is to:

- Solicit the views of the people on how they perceive the factors that contribute to desertification,
- Assess what practical measures they envisage to address the issues,
- Assess how local participation can be increased and resource mobilized to address desertification, and
- Gain consensus

The views of the local communities will be reflected in the NAP.

4. 2. Partnership agreements with the developed country parties

Given the magnitude of the problems associated with desertification issues, it is recognized by the Government that collaboration with regional and international organizations can facilitate the implementation of activities to combat desertification. Therefore, many of the activities related to combating desertification were carried out in collaboration with regional and international organizations.

International partners are involved in the combat of desertification in many ways. Several projects relevant to desertification are funded by Non-Governmental Organizations (NGOs) and implemented by the line ministries and mass organizations. They cooperate in the initial stages of project design by participating in baseline surveys and studies. In addition, the NGOs provide experts to undertake studies, participate in the monitoring and evaluation of projects, technical assistance, training and equipment. For example, UNSO/UNDP is providing support for the preparation of the NAP.

Conservation and afforestation programs and projects undertaken by the Ministry of Agriculture in collaboration with international partners include projects on: indigenous trees and shrubs; on-farm agroforestry trials in highland Eritrea; community based roadside tree planting; afforestation and soil conservation; assessment and management of riverine forest; and Integrated Watershed Management. The international governmental and non-governmental organizations involved include the European Union, DANIDA, SOS Sahel, World Vision International, Grass Root International.

5. Measures taken or planned within the framework of the NAP, including measures to improve economic environment, to conserve natural resources, to improve institutional organization, to improve knowledge of desertification, and to monitor and assess the effects of drought.

The technical committee in preparing the NAP analyzed the activities undertaken in the past to address desertification by the different sectors. Each of the members of the Technical Committee analyzed the measures relevant to combating desertification based

on the experiences of their respective institutions. The technical committee also met formally to discuss and analyze the planned measures taken or planned in each of the sectors. The purpose of the analysis was to learn from past experiences and make specific recommendations for future actions and, to integrate the activities with the measures taken in other sectors and into the NAP.

The following are the measures taken by the different sectors of the country that could directly or indirectly contribute to the combat against desertification. These have been integrated in the formulation of the NAP document together with several of the projects implemented by the different sectors for the impacts of some of the measures undertaken have been found to be positive. There are indications now that the forest cover is improving from 0.4% to about 1% due to the recent Government afforestation actions (MoA and FAO Report, 1997).

5. 1. A. Measures taken

5. 1. A. Measures taken to improve the economic environment

5. 1. 1. Agriculture, Forestry, Rangeland and livestock

- Several measures have been undertaken by the agriculture sector to improve food security and minimize land degradation. Integrated farming was practiced since 1998 to increase the agricultural production thereby improving food security.
- Village Wood lot / Farm Forestry / Community Forestry Development to introduce a village forest management system.
- None wood forest product development.
- Establishment of forage production and seed multiplication stations in different agro-ecological zones of the country. The aim is to acquaint stockowners with highly productive forage species and collect the seeds of highly desired plants for re-seeding or over-sowing.
- Development of livestock routes, markets and watering points
- Establishment of veterinary clinics and regional laboratories to control economically important livestock diseases.

5.1.2. Energy

- Improvement of efficiency of traditional wood stoves from the prevalent about 10% to over 20% efficiency. This has been successfully accomplished at the Energy Research and Training. Up to 2,000 improved traditional wood stoves are planned to be disseminated throughout the country.

- Development of under-utilized biomass energy resources. A pilot 4,000 ton per year cotton stalk briquetting plant has been installed at the Alighider Agricultural Estate with DANIDA funding. This product is a direct replacement for the dwindling fuelwood resource of the country.
- Solar PV systems have been installed for various decentralized community-based applications with an aggregate capacity of over 300 kW. Rural health stations, village water pumping, school power and lighting communications are among the applications. More solar PV systems shall be installed both for community based applications and household uses.
- Rural electrification by connection to the grid of 3 semi urban areas centers. Village electrification of at least 50 villages is planned (1999-2000).

5. 2. A. Measures taken to conserve natural resources

5. 2. 1. Agriculture, Forestry, Rangeland and livestock

- Soil and Water conservation activities have been undertaken throughout the country since 1991.
- Integrated watershed development has been practiced in many parts of the highlands
- Potential area enclosure establishment has been practiced in many parts of the country to guarantee a sustained regeneration process of trees and shrubs.
- Afforestation on degraded catchments on cash for work basis by planting trees and terracing activities has been practiced with the effective participation of the people with the Ministry of Agriculture providing seedlings and overall guidance.
- Establishment of pilot rangeland management schemes. The purpose of which is to control further degradation and enhance the proliferation of palatable plant species. This is done by fencing a potential area, harvesting seasonal rivers, and development of wells,
- Development of communal grazing lands by diverting seasonal streams and rivers for use by the communities,

5. 3. A. Measures taken to improve institutional organization

5. 3. 1. Agriculture, Forestry, Rangeland and livestock

As part of its structure, the Animal Resources Department has managed to create Animal Nutrition and Rangeland Development Division. This division has the responsibility to conserve and improve rangeland, to draw range policies, laws and regulations. Since its establishment the division has managed to establish forage production and seed

multiplication stations, developed livestock watering points and enclosed grazing lands in order to restore the indigenous vegetation and control further land degradation.

5. 3. 2. Energy

- Energy laws and regulations are being prepared in collaboration with Swed Power and SIDA financing.
- The Department has established an Energy Research and Training center.

5. 3. 3. Environment

5. 3. 4. Land

- Agroecological classification. Agroecological zones provide a geographical framework for the analysis of development constraints and opportunities

5.4. A. Measures taken to improve knowledge on desertification

5.4.1. Agriculture, Forestry, Rangeland and livestock

- Assessment of Riverrine Forest to enable appropriate strategic planning of this valuable resource.
- Development of Forestry Research and National Tree Center

5. 4. 2. Energy

- A national wind and solar energy resource assessment is in progress with the help of GEF and SIDA financing.

5. 4. 3. Environment

- The draft guidelines on Environmental Impact assessment was prepared wherein the role and place of biodiversity, in particular the protection of Environmentally Sensitive Areas (ESAs) is recognized and taken into account.
- Eritrea Biodiversity Stock-taking assessment report was prepared in 1998. The main objective or task was to bring together information relating to the variety of ecosystems, flora, fauna as well as genetic complexes existing within the country.
- Information System on Land Degradation as one component of the Environmental Information System Strategy Document was prepared. The information could be useful for planning, implementing, monitoring and evaluating projects.

- An environmental information documentation center has been developed.
- Training is being given to the village administrators and elders to raise their awareness on land degradation.
- An Initiation Workshop on Climate Change Issues was held to sensitize the various stakeholders about climate change issues in Eritrea through the presentation of various papers having different climate change themes.
- An assessment of long term (1885-1995) rainfall trend of Eritrea has been done.

5. 4. 4 Land

5. 4. 5 Major groups

5. 4. 6 Water

- Sector study on National Water Resources and Irrigation Potential project is being implemented by the WRD in collaboration with the MoA.

5. 5. A. Measures taken to monitor and assess the effects of drought

5. 5. 1. Agriculture, Forestry, Rangeland and livestock, crop production

- The Early Warning and Food Information Unit was established in 1993 and started its activities in 1995 within the Ministry of Agriculture. Food production assessment is consistently being carried out. This system is helpful in indicating the food situation of the country. It also provides a timely recognition of problems and timely transfer of information to the decision-makers.

5. B. Measures planned

The different sectors have come up with the following recommendations in the NAP to be undertaken by their sectors and sub-sectors to combat desertification.

5. 1. B. Measures planned to improve the economic environment

5. 1. 1. Agriculture, Forestry, Rangeland and livestock

- Introduction of intensive mechanized farming through the expansion of agricultural research, extension, and training; strengthening the plant protection activities; accelerating the program of importing and testing improved varieties and fertilizers.
- Development of irrigation schemes
- Improvement of crop management through crop selection, early planting, use of

fertilizers and improved cropping systems and crop rotation

- ❑ Promotion of wise use of none wood forests products
- ❑ Introduction of mechanisms for forest fire prevention
- ❑ Provision of sufficient veterinary services and strengthening and equipping the existing ones to control the economically important diseases
- ❑ Establishment of new livestock markets and market outlets and strengthening the already functioning ones
- ❑ Collection of indigenous seeds of grasses and trees for over sowing and re-seeding so as to improve range condition and increase livestock productivity
- ❑ Setting aside grazing and forage reserves
- ❑ Provision of credit services to restore herd numbers following drought
- ❑ The introduction of a breeding programme which could result in the production of quality livestock and improvement of milk yield
- ❑ Development of management plan for riverrine forests

5. 1. 2. Energy

5. 1. 3. Environment

5. 1. 4. Land

5. 1. 5. Major groups (women, youth, workers, private sector,)

- ❑ Technology transfer: the chamber of commerce will encourage the business community to invest in the manufacture of environmentally friendly appliances such as gas, kerosene, electric stoves etc instead of wood for fire and use of metallic furniture instead of wooden furniture.
- ❑ Fund raising by seeking voluntary contributions and negotiating measures that would be mandatory.
- ❑ Mobilization of the youth, women, workers and the private sector to plant trees in their premises and undertake an annual planting of trees in selected areas as a compensation to the imposition on environment by the manufacturing sector.

5. 1. 6. Water

- ❑ Introduction of efficient water use management

5. 2. B. Measures planned to conserve natural resources

5. 2. 1. Agriculture, Forestry, Rangeland and livestock

- ❑ Improvement of soil management to create optimum conditions for growth through improved soil fertility measures.
- ❑ Soil and water conservation practices including agronomic and vegetative practices and construction of physical structures.
- ❑ Encourage Fuel wood conservation and wood plantations.
- ❑ Enhancement afforestation and soil conservation.
- ❑ Encourage area closure for natural regeneration with planting of improved seeds of grasses and multi-purpose trees.
- ❑ Development of agroforestry.
- ❑ Establishment of protected areas.
- ❑ Identification and development of rangelands rich in wild games.

5.2.2. Energy

5. 2. 3. Environment

- ❑ Establishment of botanical garden and zoo for ex-situ conservation of forest and wildlife endangered species.

5. 2. 4. Land

5. 2. 5. Major groups (women, youth, workers, private sector,)

5. 2. 6. Water

- ❑ Promotion of water conservation practices by: devising catchment treatment programs to prevent or minimize siltation of water reservoirs; planning and designing stream water impounding structures to provide water supply and as a means of recharging ground water aquifers; and promote and advocate water conservation methods and strategies.

5. 3. B. Measures planned to improve institutional organization

5. 3. 1. Agriculture, Forestry, Rangeland and livestock

- ❑ Capacity building
- ❑ Development of livestock watering points at strategic sites
- ❑ Enhancement of International and Regional cooperation on forest conservation and development
- ❑ Establishment of a national institution responsible for the improvement of pastoralism and the livelihood of pastoralists to revise and update the existing traditional (customary) laws on the utilisation and management of communal grazing lands
- ❑ Design a regulation that makes stock owners keep a limited number of livestock that do not exceed the carrying capacity of the rangeland

5. 3. 2. Energy

- ❑ Preparation of Energy Master Plan.
- ❑ Development of appropriate policy instruments that encourage the private sector involvement in the energy market, tax incentives etc.
- ❑ Awareness education and demonstration programs about renewable energy sources, rural electrification from the central grid.
- ❑ Training of local technicians and entrepreneurs to operate local businesses that are able to operate and maintain the renewable energy systems.
- ❑ Develop human and institutional capacity; research centers and international and regional linkages.
- ❑ Financing and credit schemes to help realize the purchasing a solar PV system and cover capital investments costs involved in the supply of grid electricity to individual homes.

5. 3. 3. Environment

- ❑ Capacity building on taxonomy and ex-situ conservation knowledge

5. 3. 4. Land

- ❑ Drawing of an integrated Land Use Policy based on the principles of efficiency, equity and environmental soundness.

- Assessment of natural resources for effective and rational land use planning and to make decision on direct investment on natural resource conservation and protection.
- Application of the new land tenure in pilot areas. Provision of necessary guidelines and directives for implementation of the new land tenure and the establishment and strengthening of the necessary institutions should be a priority.
- Introduction of community based participatory land use planning in areas where the new land tenure is applied.

5. 4. B. Measures planned to improve knowledge of desertification

5. 4. 1. Agriculture, Forestry, Rangeland and livestock

- Development of conservation Education
- Research on sand dune fixation through the establishment of shelter belts
- Preparation of range condition manuals, brochures and pamphlets
- Research on sand dune fixation through the establishment of shelter belts
- Provision of assistance to farmers for in-situ conservation of indigenous crops and Landraces

5. 4. 2. Energy

- Feasibility study for the use of natural gas in the country in the country and for export
- Geothermal energy potential feasibility study.

5. 4. 3. Environment

- Survey of national flora and fauna
- Inventory of plant genetic resources
- Preparation of legislation of Biodiversity
- Assessment of endangered plant and animal species
- Baseline survey on the distribution and rate of spread of major alien invasive species

5. 4. 4. Land

5. 4. 5. Major groups (women, youth, workers, and private sector)

- Integration of desertification issues in all skills training programs of NUEW
- Awareness campaign by NUEW NUEYS through staging general knowledge competitions, seminars on environmental issues, newsletters, publications and distribution of posters.

5. 4. 6 Water

- Establishment of a Water Resources Information System in order to develop a water resources management strategy.
- Comprehensive water resources assessment to identify the main hydrological environments of the country and conduct water resource investigation of representative basin of each environment.
- Monitoring program of the ground and surface water, and water quality

5. 1. C. Ongoing Interventions

The following projects have been and are currently under implementation. They have been included in the NAP document to implement the combat against desertification.

- Integrated Watershed Development project is a joint project of the Ministry of Agriculture and DANIDA with an objective of improving the capacity within the Ministry of Agriculture to plan, implement and monitor community based land and water management activities. The Ministry of Agriculture with full participation of farming communities prepared guideline for Integrated Watershed Development. The purpose of this guideline is to help all stakeholders in coordinating their activities towards realizing sustainable watershed management.
- Assessment and Management of Riverrine Forest (AMRF) is a joint project of MoA and SoS Sahel to support MoA in mitigating some of the harmful impacts in the riverrine forest to enable appropriate planning of these resources.
- National Tree Seed Project funded by DANIDA to improve sustainable provision of genetically and physiologically suitable seed and planting material from selected seed sources of both indigenous and exotic woody species to meet the present and future needs for tree planting activities in Eritrea by strengthening national institutional capacity.
- A project, Preparation for Eritrea's First National Communication in Response to its Commitments to the UN Framework Convention on Climate Change, is funded by

GEF/UNDP (Global Environmental Faculty) and is being implemented by the Ministry of Land, Water and Environment. The overall objective of the project is to build capacity and facilitate the process of taking into account climate change related issues in Eritrea, thus enabling the country to deal with climate change and its adverse effects.

- The Department of Environment is implementing a project with an objective of establishing a “Peoples Forum on the Environment” on the basis of the structures of the Ministry of Local Government.
- The Ministry of Fisheries is implementing a project, mangroove plantation and shrimp farming, in areas where there are no mangroove but suitable for farming. In addition, a pilot project, Integrated Salt Water Farming project in being implemented including shrimp farming and Salicornia and grass farming for cheap wood production, food (man and animals), and oil production.

5.2. Linkage achieved with sub-regional and regional action programs (SRAP & RAP)

Actions or activities in the NAP that have a sub-regional or regional projection include research, monitoring and exchange of information through direct linkages with international offices and organizations like IGAD. For example, there the Regional office for Mapping and Remote Sensing (RMRS) in Nairobi, Kenya, which serves Central, Eastern and Southern African countries by providing them with satellite maps could provide satellite information on the changes of plant cover, soil types and water conditions of the dry land ecosystems.

The National Tree Seed Center of Eritrea supported by DANIDA and FAO is expected to benefit by collaborating in the network of National Tree Seed Centers operating in Kenya, Sudan, Tanzania, and Uganda. These Tree Seed Centers are supported by DANIDA and UNSCO and receive technical backstopping from DANIDA Forest Seed Center. Technical collaboration between the centers is coordinated through annual meetings. Regional cooperation on the development and conservation of forest resources is planned to include:

- ❖ Development of criteria for sustainable forest development
- ❖ Financial assistance, scientific research and technology transfer
- ❖ Trade on forest products
- ❖ Sectoral and cross-sectoral linkages in solving forest related issues at the national and international levels.

Desertification control requires international and regional cooperation in order to be adequately addressed. The key policy commitment is to strengthen and expand the mandate of IGAD. Linkages exist with IGAD and the Committee on Science and Technology. Sub-regional and Regional action programs like awareness creation,

creation of an enabling environment (legal, institutional, economic and policy matters) and identification of an appropriate action program have been integrated into the NAP process.

With respect to links with sub-regional and regional action, the NAP process intends to focus on 3 aspects of regional cooperation. These are:

- ❑ Cooperation in the rational use and management of shared resources critical in combating desertification (particularly the future of grazing land of nomadic populations) water resource use, particularly resources that transcend national boundaries.
- ❑ Cooperation in the management and solutions of shared problems. This may include cooperation in integrated (including trans-boundary) survey and control of desertification caused by wind and water erosion; preservation of biodiversity; and examination of relationships between global climatic change and desertification.
- ❑ Close contact and cooperation between the focal points scholars to establish information exchange bond on development of the NAP related information in a compatible manner. To this effect, the second workshop for 15 selected African UNCCD Focal Points was held in Asmara on April 1997.

The NAP process intends to work with IGAD's Committee on Science and Technology for desertification control.

6. Financial allocations from national budgets in support of implementation as well as financial assistance and technical cooperation received and needed, identifying and prioritizing requirements.

6.1. Adopted financial mechanisms

The decentralization process of establishing regional administrations has facilitated financial empowerment of the local actors in requesting budget needed to implement projects in their regions. The short, medium and long-term plans are problem-oriented and are drawn in the zones. The Government allocates budget for the regions based on their request and plans. The regions utilize the budget allocated to them for the implementation of their activities. The conservation activities are implemented by the local people based on cash for work basis under the guidance of the Ministry of Agriculture staff stationed in the regions (zobas). Those who participate in the implementation of the activities are paid based on guidelines (work norm) set out by the Government. A control mechanism exists whereby the Baitos control the financial operations in their region.

In addition to the Government budget allocated for the implementation of conservation activities, International non-governmental organizations and bilateral donors fund several

projects. The existing funding sources include UNSO/UNDP, UNCCD, IGAD, UNICEF, Heinrich Boll Foundation, World Bank, GEF, UNFPA, DANIDA, EU, SOS Sahel, FAO, NORAD, ADF, and SIDA

6. 2. Mobilization of national resources

In order to mobilize resources from local communities, an appropriate sensitization program must be planned. It should indicate the seriousness of desertification and its consequences on the daily lives of the communities through workshops and meetings. However, desertification is a complex issue that can be dealt with at different levels. This makes it difficult to put figures describing exactly all the efforts undertaken. Soil conservation activities like terracing and planting of trees being major steps of combating desertification are being implemented using both Government funding and labor force from the communities. The Ministries of Agriculture, Ministry of Local Government, and Ministry of Education in collaboration with mass organizations (NUEYS and NUEW) have been mobilizing the people and students to participate in these programs.

Some major areas of activity include afforestation which calls on large inputs from rural communities and students. Since 1994, high school students have been participating in afforestation and soil conservation campaigns during their summer vacation in the whole country. This program is coordinated by the Ministry of Local Government, the Ministry of Education, and the Ministry of Agriculture. Since then, about 19,000 students have participated every year for 45 days. The major undertakings include construction of 614 hectares of hillside terraces, and planting of 5.8 million seedlings. The first round of National Development Campaign was organized in May 1998 with a wide participation and financing of the Eritrean population. In this program 25,893 youth, undergoing their National Service, were deployed at improvement of 10 degraded catchments for three weeks. 400 Hectares of hillside terraces, 167 Km of check dams, 20 hectares of microbasins, and 439,408 pits for planting seedlings were prepared.

In addition to the Government input, UNSO/UNDP has provided seed money to start work on National Desertification Funds (NDFs) and is also financing the NAP process in collaboration with the Government.

6. 3. Mobilization of technical cooperation

In addition to financial support from external sources technical cooperation is an essential component in support of the implementation process. International partners have been providing experts, advisors and consultants in the process of planning and implementation of programs and projects.

IGAD, in cooperation with the secretariat on the Inter-governmental Negotiating Committee on Desertification – INCED and UNSO/UNDP convened a high level sub-regional consultation in Asmara, Eritrea from 3-5 August 1995 and adopted a set of broad

priority areas which were considered as basis for elaborating a Sub-regional Action Program. These include:

- ❖ Information collection, analysis and exchange
- ❖ Research and development
- ❖ Education and public awareness
- ❖ Coordination of progress to develop alternative energy sources
- ❖ Early warning systems and joint planning for mitigating the effects of drought
- ❖ Capacity building
- ❖ Cooperation in the management and control of pests, weeds and plant and animal diseases.

In light of the above mentioned priority areas, the Ministry of Agriculture has been working in collaboration with the Desert Locust Control in the East Africa Region (DLCO-EA) to monitor and control the migratory pests in East Africa.

In addition, consultations were conducted with development partners in order to alleviate the country's high dependence on biomass for energy production. For example, introduction of electricity system to villages, promotion of renewable energy technologies, and capacity building were undertaken through technical cooperation with development partners to encourage and support the use of renewable and environmentally sound energy sources to benefit villages and towns.

7. Review of benchmarks and indicators utilized to measure progress and an assessment thereof.

Eritrea intends to assess the progress being made in combating desertification both through formal and informal means. With respect to informal means the following procedures are envisaged.

- Meetings of the technical committee to enable the committee to exchange information and monitor the progress of NAP process. Communication between the committee members is also facilitated through e-mail, fax and telephone and informal meetings.
- Workshops and seminars
- Frequent monitoring through the preparation of weekly, monthly, half-year and yearly reports of activities related to desertification. In addition, yearly review mission will be undertaken.
- Early warning and food information System will provide information on the progress being made to achieve food security.

7.1. Benchmarks

One of the key elements of the NAP process will be to discuss and agree on a set of benchmarks or targets to be achieved in addressing desertification. These benchmarks will consist of qualified and time bound targets:

- to reduce rain-fed crop land loss,
- to reduce irrigated crop land loss,
- to reduce range land loss,
- to reduce forest and wood land loss,
- to reduce soil erosion by wind and water particularly erosion from crop land,
- to reduce deterioration of soil, and
- to reduce loss of natural vegetation.

7.2. Indicators

Another element of the NAP process will be to establish indicators for the benchmarks or targets that have been subject to agreement as stated above. These will include inter-alia periodic estimates of:

- the rate of reduction of rain-fed cropland loss,
- the rate of reduction of irrigated crop land loss,
- the rate of reduction of range land loss,
- the rate of reduction of forest and wood land loss,
- the rate of reduction of soil erosion from crop land, and
- the rate of reduction of natural vegetation loss.

The NAP process intends to streamline and systematize national and local reporting on measures taken to combat desertification. The format under consideration is based on analysis of measures and actions taken and impacts achieved in the key areas: agriculture, energy, environment, land, major groups, and water in terms of:

- improving the economic and social environment,
- improving natural resource conservation,
- improving institutional capacity
- improving knowledge on desertification
- improving the capacity to predict and mitigate drought
- improving local participation

A matrix of the key areas or sectors concerned and the impact being achieved will be developed. This will be assessed periodically. Each cell in the matrix will have precise (possible quantified) information on progress being made to address desertification.

ANNEX 1

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ANNEX 2

LIST OF ABBREVIATIONS

COP 1 & 2: First and second Conference of the Parties

GIS: Geographic Information System

ICCD: International Convention to Combat Desertification

MoA: Ministry of Agriculture.

NAP: National Action Program

NCB: National Coordination Body

NCEW: National Confederation of Eritrean Workers

NEMP-E: National Environmental Management Plan - Eritrea

NFP: National Focal Point

NGO: Non-Governmental Organization

NUEYS: National Union of Eritrean Youth and Students

NUEW: National Union of Eritrean Women

UNCCD: United Nations Convention to Combat Desertification

ANNEX 3

WORK PLAN OF THE NAP

Regional Consultations: June 1999

National Forum: First week of July 1999

Adoption of the NAP: August 1999