

REPUBLIC OF GHANA

SECOND NATIONAL REPORT TO THE CONFERENCE OF PARTIES TO THE UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION

APRIL, 2002

Acronyms

AMCEN	African Ministerial Conference on the Environment
CCD	Convention to Combat Desertification
CCFI	Collaborative Community Forestry Initiative
SADEP	Small Holder Agriculture Fund Development Programme
CSIR	Council for Scientific and Industrial Research
EAP	Environmental Action Plan
EPA	Environmental Protection Agency
ERP	Economic Recovery Programme
FD	Forestry Department
FORIG	Forestry Research Institute of Ghana
FRMP	Forest Resources Management Project
GERMP	Ghana Environmental Resources Management Project
GNFS	Ghana National Fire Service
ICOUR	Irrigation Company of Upper Region
INCD	Intergovernmental Negotiating Committee for the Convention to Combat Desertification
IRNR	Institute of Renewable Natural Resources
LARC	Land Administration Research Centre
LUT	Land Utilisation Type
MES	Ministry of Environment and Science
MOFA	Ministry of Food and Agriculture
MTADP	Medium-Term Agricultural Development Programme
NAP	National Action Programme
NDF	National Desertification Fund
NGGS	Northern Ghana Guinea Savanna
NGO	Non-Governmental Organisation
NPACD	National Plan of Action to Combat Desertification
NRMP	Natural Resources Management Project
UWADEP	Upper West Agricultural Development Fund

RIPS	Regional Institute for Population Studies
RSAU	Remote Sensing Application Unit
SARI	Savanna Agricultural Research Institute
SRI	Soil Research Institute
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNSO	United Nations Office to Combat Desertification and Drought
DISCAP	District Capacity Project
WRI	Water Research Institute
NEAP	National Environmental Action Plan
UNCOD	United Nations Conference on Desertification
NRMP	Natural Resources Management Programme
SRMP	Savanna Resources Management Programme
COP	Conference of the Parties
PSRP	Poverty Reduction Strategy Paper
NTFPs	Non-Timber Forest Products
VIP	Village Infrastructure Project
FORIG	Forestry Research Institute of Ghana

1.0 SUMMARY

The Republic of Ghana is located in south-central Western Africa, south of the Sahara and north of the Equator on the Gulf of Guinea. It is bounded on the north and northwest by Burkina Faso, on the west by Cote d'Ivoire, and on the east by Togo, and on the South by the Atlantic Ocean. The country is administratively divided into ten regions and one hundred and ten districts.

Ghana has an area of 238,537 square kilometers and a current 2000 Population figure of about 18.4 million, of which 51.4% live in the relatively dry areas, which are subject to moderate to high levels of desertification. These dry areas are found mostly in the Northern and Upper Regions and also in the coastal savanna zone. It is also now established that the transition zone between the forest and savanna ecological zones and some parts of the forest zones are under threat of desertification. Hence, these areas are being considered under the NAP for action to reverse the trend of land degradation. Overall, approximately 30-40% of the total land area of Ghana is subject to desertification.

Current trend in forest destruction in the forest belt through farming, logging, mining, bushfires, firewood and charcoal production, shows that the area could face the wrath of desertification if remedial measures are not put in place. In the savanna zone (covering about 15.6 million hectares), as much as 14.7 million hectares are unreserved and are being destroyed at an estimated rate of 20,000 hectares per annum.

Such is the scenario of land degradation in Ghana that has made the desertification threat to assume national proportions. Although development and environment issues are inextricably linked, the quest for economic growth has, for a long time, over-shadowed environmental concerns. Consequently, the process of development has often left in its trail, deterioration of productive lands, deforestation, desertification, air and water pollution and poverty.

This necessitated the redirection of Ghana's development efforts into a sustainable development process and sound environmental management, which was recognized early in 1973 with the creation of the Environmental Protection Council (which was transformed into the Environmental Protection Agency in 1994) to focus on the integration between development and the environment.

This process was given an added impetus in 1988 when the Government of Ghana initiated a major effort to put the essence of the intricate relationship between the environment and development on the priority agenda through the preparation of an Environmental Action Plan (EAP) for Ghana, which was adopted in 1991. The Ghana Environmental Resource Management Project (GERMP) was also put in place to ensure the implementation of the EAP alongside other plans and programmes. A number of other policies and programmes in natural resources conservation have been formulated to ensure their sustainable utilization and management.

The Earth summit in Rio produced, among other things, an Earth Charter embodying basic principles regarding general behavior towards the environment and for bringing about sustainable development - an Agenda for Action for dealing with major environmental issues in the socio-economic development process Dubbed "Agenda 21". One of the major offshoots of the Summit (UNCED) was the setting of the stage for the negotiation of an International Convention to Combat Desertification, which was adopted in June 1994 and finally came into force in December 1996.

In line with Ghana's quest for sustainable development and also to fulfill the nation's obligations under the UNCCD, a National Action Programme has now been elaborated and validated at the National Validation Workshop. It is being finalized for consideration and adoption by the Parliament of Ghana.

This report to the conference of parties is in accordance with Article 26 of the UNCCD requirement of parties. The report sets out to upgrade or provide new information based on the format provided by the UNCCD which include; strategies and priorities established within the framework of sustainable development plans and policies, the institutional measures taken to implement the Convention, participation and consultative process in support of the preparation of the National Action Programme and partnership agreement with developed country parties, some measures taken to conserve natural resources and to improve the economic environment and knowledge of desertification information on financial allocations from National Budgets and other sources and a review of Benchmarks and Indicators utilized to measure progress and assessment thereof: this report is therefore an update of events since the first report to the COP₃.

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

2.1 Major policies, plans and programmes that are on-going

In Ghana's first report to the conference of parties (COP3) in Recife, Brazil, the existence of many enabling policies, strategies, legislations and plans that directly relate and support the implementation of the UNCCD in the country were outlined. Among the numerous sustainable development policies and plans enumerated but which continue to direct the course of development in the country are:

The Environmental Policy, which seeks to ensure reconciliation between economic development and natural resources conservation. The National Environmental Action Plan (NEAP) with its implementation strategy found in the Ghana Environmental Resource Management Project (GERMP) where activities initiated in the various components of the project are still on-going.

The report also highlighted on aspects of the National economic framework and policy, particularly, the National Development Policy Framework (NDPF) which has been described as vision 2020, and constitutes the socio-economic development aspects of the national sustainable development Agenda.

Efforts to achieve sustainable development and also to combat desertification and drought have been largely dependent on the commitment of the Government, which passed legislation to support the creation of various institutions and their functions such as:

The passing of the National Development Planning Commission Act 1994 (Act 479), which established the National Development Planning Commission to be responsible for socio-economic development initiatives;

The passing of the National Development Planning Systems act 1994, (Act 480);

The passing of the Local Government act 1993 (Act 462), which empowers the district assemblies as the local planning authorities;

The enactment of the district Assemblies Common fund Act 1993 (Act 455) which provides the necessary funds for the development of the localities; and

The decentralization of administrative planning and executive functions to the local level as against centralization of critical activities.

2.2 Other programmes which are ongoing since the first report include:

- The National Poverty Reduction Programme.
- Ghana Medium Term Agricultural Development Programme (MTADP), an agenda for sustainable Agricultural Growth and Development.
- The Natural Resources Management Programme.
- The Capacity Building Development and Utilization Programme.
- The Decentralization Programme.

The challenge so far has been how to harmonize all these policies, plans and programmes which are located in different Ministries, Departments and Agencies where they are regarded as entities and hence lose their multi-sectoral dimensions and applications.

Some reported growth obtained by Ghana through the ERP and SAP was not achieved without a cost. There is enough evidence to suggest that the growth was partly achieved at the expense of the environment. Some conservative estimates made in 1988 of the cost to the national economy arising from environmental degradation in various sectors including agriculture, forestry, wildlife, industry and mining put the figure at about 4% of the total GDP.

Available data indicated that the negative effects of macro-economic policies as they relate to the nation's natural resource endowment could offset any economic gains in the long term unless measures are taken to incorporate environmental issues into current economic strategies. It is evident that the lack of synergy and compartmentalization of economic and environmental policy formulation was partly responsible for this situation. The two aspects of development have been compartmentalized and treated separately at the expense of long-term sustainability with respect to economic efficiency, environmental integrity and social equity.

2.3 Agenda 21/ NACIA 21

Since the first report a number of other significant programmes, policies and strategies have been adopted to ensure sustainable development. The endorsement of Agenda 21 as the blueprint for Sustainable Development in the 21st Century has enabled Ghana to institute a number of measures including the establishment of the National Advisory Committee on the Implementation of Agenda 21 (NACIA 21). This committee is cross sectoral in nature and was set up to ensure the integration of environmental issues into the country's development planning process.

2.4 UNDP/Ghana Capacity 21 Programme

UNDP and the Ghana Government initiated action to develop a programme for the implementation of Agenda 21 entitled 'Ghana Capacity 21 Programme'. It is aimed at developing requisite capacities at the national, regional and district levels to ensure sound environmental management underpinned by the application of science and technology.

At the national level the programme sought to build capacities of relevant key institutions such as the NDPC, MES, NACIA 21, EPA and the Town and Country Planning Department to enable them to effectively network as well as formulate sustainable development policies.

The focus at the regional level was on addressing development and environmental capacity building needs of the Regional Co-coordinating Councils and the Regional Planning Co-ordination Units, as well as the Environmental protection Agency (EPA) offices so that they can fulfill their co-ordination and advisory functions adequately.

At the District level where the programme was more focused, the concern was to maximize participation of local communities by strengthening District Assemblies through training, orientation courses and other capacity building activities that will enable them to plan, implement and monitor development programmes in a sustainable manner i.e. building District/Local level capacity to incorporate environmental concerns in the development and decision-making process.

The programme was expected to use science and technology to solving environmentally related problems through training, awareness creation and provision of support to community

-based physical sub-projects (demonstration effects). Eight out of the existing 110 District Assemblies were selected to participate in the pilot phase of the programme.

2.5 The Environmental Protection Agency Act (490).

In the first report one major event that was not included but has considerable significance was the enactment of the Environmental Protection Agency Act (1994) (Act 490) transforming the basically advisory Environmental Protection Council (EPC) into the Environmental Protection Agency, with adequate regulatory and enforcement powers. The Agency is ensuring the implementation of policies, programmes and projects that ensure the sustainable environmental management including the just ended GERMP project and other ongoing projects. The coming into force of the Legislative Instrument LI 1652 further enhanced EPA's ability to ensure that certain development projects with negative environmental impacts are subjected to the Environment Impact assessment procedures.

The Agency has also championed efforts to combat desertification and drought since 1988 when it first sought support from UNSO to prepare the National Action Plan to Combat Desertification and Drought. It has since become the lead agency in the implementation of the convention.

2.6 National Land Policy

Another significant development in relation to policy has been the formulation of the National Land Policy.

The land policy has as its aim the "Judicious use of the nation's land and all its natural resources by all sections of the Ghanaian society in support of various socio-economic activities undertaken in accordance with sustainable resource management principles and in maintaining viable ecosystems".

The Land Policy sets out certain objectives and also provides a policy framework to guide stakeholders. These include the following aspects:

- Ensuring sustainability in land use.
- Equitable access and security of tenure

- Protection of indigenous rights in land.
 - Ensuring timely, fair and adequate compensation for lands acquired for the state.
 - Instilling order and discipline on the land scene.
 - Minimizing and eliminating sources of protracted land boundary conflicts.
 - Building institutional capacity at all level to ensure effective land service delivery.
 - Promoting community participation in land matters that would guarantee optimum returns on land investments.
 - Promoting research into various aspects of land ownership and the operations of the land market and
 - Ensuring continuous public education of the general public on land matters.
- (National Land Policy June 1999, Section 3.0)

2.6.1 The Land Administration Project

The Ministry of Lands and Forestry is preparing a Land Administration Project (LAP) as the main tool for implementing the National Land Policy. The project aims to reduce poverty and enhance social growth through improving security of tenure, accelerating access to land by the populace and fostering efficient land management by developing efficient systems of land titling and administration based on clear, coherent and consistent policies and laws supported by appropriate institutional structures. The project has four main components as follows:

- a. Harmonious policy and legislative framework for sustainable land administration.
- b. Formalizing the institutional arrangements in a decentralized land administration system.
- c. Improving security of tenure.
- d.** Strengthening revenue generation within the framework of developing a sustainable self-financing administration system.

2.7 Forest and Wildlife Policy

A new Forest and wildlife Policy was formulated and published in 1994, aimed at the conservation and sustainable development of the nation's forest and wildlife resources for maintenance of environmental quality and perpetual flow of optimum benefits to all

segments of society. This revision replaces the Forest Policy of 1948 and reflects current national development policies as enshrined in the 1992 Constitution of Ghana and embodied in the Environmental Action Plan of 1991. It is also consistent with the objectives of international agreements and conventions ratified by Ghana.

The Forest and Wildlife Policy seeks for:

- The sound management and enhancement of the permanent forest and wildlife estate for the provision of economic, cultural/spiritual and environmental goods and services;
- The promotion of efficiency in the utilization of resources from the forest and wildlife estate;
- The promotion of active stakeholder participation in the management of the forest and wildlife assets. Enhancement of public education and awareness creation;
- The promotion of client-led and user-friendly research in forest and wildlife management (utilization, development) and conservation; and
- The development of effective capabilities at all levels for sustainable wildlife management.

These stated policy objectives are achievable by focusing on priority strategy issues, which in the implementation phase will need to be closely monitored. The operationalization of the new Forest and Wildlife Policy is supposed to be done through the Forestry Development Master Plan (FDMP).

2.7.1 Forestry Development Master Plan.

The FDMP serves as a basic framework for sector institutions to prepare, implement and development programmes in the forest and wildlife sector. The draft Forest Development Master Plan is a comprehensive plan of action to guide implementation of 1994 Forest and Wildlife Policy objectives and key strategies up to the year 2020, in line with actions outlined by the National Development Planning Commission's new guidelines expansion of Ghana-Vision 2020 (Ghana's Vision 2020 foresees Ghana as a medium-income country by the year 2020)

The Master Plan is to be implemented in three time horizons, namely, phase I (1996-2000), phase II (2001-2010), phase III (2011-2020) to give optimal fulfillment of the objectives of the plan, which, are identified with that of the 1994 Forest and Wildlife Policy. Objectives of the plan are to be pursued through four main development programmes, specifically:

- Sustainable forest and savanna management
- Propagation of forest-based products.
- Rationalization of the forest industry.
- Wildlife and protected areas conservation.

2.8 National Population Programme

Ghana also has a National Population Programme, which has the objective of developing the capacity of the population to effectively exercise options to control fertility; and strengthening and enhancing services, which promote and support improved fertility management by the population. The programme also aims at establishing effective measures for fertility management with a view to achieving a significant reduction in the rate of population growth over the longer term. These are to be achieved in the following ways:

- The National Population Council developed a national communication strategic framework to guide all stakeholders in the dissemination of information and education issues on population and sustainable development.
- It has also established regional oversight, district advisory and advocacy committees to implement programmes on population and sustainable development issues at the grassroots level.

2.9 Ghana Poverty Reduction Programme/Strategy

The intricate relationship between development and Environment and the cycle of poverty and environmental degradation are being addressed through a number of National Poverty Reduction Programmes as indicated in the first report.

Currently, Poverty Reduction has become the main pre-occupation of the Government hence new initiatives to directly address poverty including the Ghana Poverty Reduction Strategy Programme, Emergency social relief Programme, the Social Investment Fund and the entry into the Highly Indebted Poor Countries (HIPC) Initiative have together provided substantial foreign and local funds towards poverty reduction in Ghana. For example, the HIPC initiative

has provided substantial debt relief for Ghana amounting to close to 250 million dollars per annum. The main conditionality being that the amount accrued from the initiative will be channeled into poverty reduction activities as outlined in the Ghana Poverty Reduction strategy paper produced by the Government.

2.9.1 Ghana Poverty Reduction Strategy (GPRS).

Ghana Poverty reduction Strategy represents a set of comprehensive policies to support growth and poverty reduction over a three-year period (2002 –2004). Under this programme the Government aims at creating wealth by transforming the nature of the economy to achieve growth and accelerated poverty reduction and the protection of the vulnerable and excluded within a decentralized, democratic environment.

This goal is to be achieved by:

- Ensuring sound economic management for accelerated growth;
- Increased production and promoting sustainable livelihoods.
- Direct support for human development in the provision of basic services.
- Providing special programmes in support of the vulnerable and excluded;
- Ensuring good governance and increased capacity of public sector and
- Active involvement of the private sector as the main engine of growth and partner in nation building.

The implementation of Government medium term priorities will therefore generate growth and reduce poverty. The priorities over the period 2002 – 2004 are infrastructure, modernized agriculture based on rural development, enhanced social services, good governance and private sector development.

Addressing poverty by the provision of above goods and services as well as alternative livelihoods will ensure a reduction in the exploitation of natural resources and reduce environmental degradation.

2.9.2 The Social Investment Fund (SIF)

It is a special fund set aside to provide direct assistance to Ghana's urban and rural impoverished communities to help reduce the poverty situation in the country. Its aim is to

work in partnership with the poor, local Government Structures, donors and NGOs for sustainable community Based Development. SIF is therefore a poverty reduction programme, which seeks to stimulate development activities through providing easy access by the poor to resources that facilitate their development efforts. It targets the poor in society with special attention given to Women, the youth and street children in impoverished communities.

Commitments by Government in the promotion of sustainable development in the country are manifested in the various actions taken in transferring major development planning initiatives, responsibilities and actions to the District assemblies and the establishment of a District Assembly Common Fund to provide the District Assemblies with resources for development activities from the national coffers.

When the NAP is adopted District Assemblies will be required to channel some of these funds into the Desertification Fund for community level activities to combat desertification and drought.

3.0 INSTITUTIONAL MEASURES TAKEN TO IMPLEMENT THE CONVENTION

3.1 Ministry/Agency/Responsible for the Coordination of CCD activities

The Ministry of Environmental and Science (MES) until recently was known as the Ministry of Environment Science and Technology is now without the technology division but still maintains its function of providing policy direction on Environment and Science in Ghana. The main agencies or institutions under this Ministry that are involved in combating Desertification and Drought are the EPA and some institutes of the Council for Science and Industrial Research (CSIR).

Committees exist at the national level for coordinating and providing technical direction for desertification and drought issues. The National Committee on Desertification is hosted by the MES under the chairmanship of the Chief Director. While the Technical committee and the National Focal Point on Desertification and drought are hosted by the EPA. The Agency now serves as the lead agency in the coordination and implementation of the CCD.

The various institutes of the CSIR undertake diverse research activities on land degradation or desertification. Institutes like Savanna Agricultural Research Institute (SARI) and the Soil/Crop Research Institutes are particularly very active in this area of research

3.2 National Committee On Desertification

At the national level the National Committee on Desertification (NCD) popularly referred to in some countries as the National Coordination Body continues to be responsible for co-coordinating and providing policy guidance in the implementation of the convention to Combat Desertification.

The Committee is multi-disciplinary and multi-sectoral with members drawn from relevant Government Departments and Agencies, Ministries, Research institutions, Civil Society, NGOs, Women's groups and Traditional authorities. It meets quarterly to deliberate on issues related to desertification and drought.

Also at the National level, a Technical Committee on desertification operates within the EPA ostensibly to provide technical guidance and direct scientific research on desertification and drought.

Members of the two committees were found to be mostly from the same organizations; hence the separation of functions did not appear to bring about the needed co-ordination in the effective implementation of the CCD. Budgetary allocations to service both committees were usually not forthcoming, hence at the National validation workshop it was suggested that only the NCD should operate for the time being. The Committee is to be chaired by the Chief Director of the Ministry of Environment and Science (MES).

However, during the NAP implementation stage, when funds become available, the Technical committee will be very relevant in providing technical backstopping, coordination, monitoring and evaluation of the NAP implementation process.

3.3 Activities undertaken by the NCD

The NCD since the last report has been very pro-active in initiating and undertaking activities in support of the implementation of CCD. Some of the activities undertaken during this period include:

3.4 Familiarization Tour to Desertification Prone areas

The NCD organized a tour for all committee members, the minister for Environment, Science and Technology and personnel of MES and EPA to desertification prone areas of the three Northern Regions to ascertain at first hand the status of desertification in those areas. The tour took the committee beyond the borders of Ghana to Burkina Faso to see how the Burkinabes are able to control bush fires and to learn from their experiences.

3.5 Translation of UNCCD Document into Local Languages

The committee also ensured the translation of the UNCCD document into some major local languages within the affected regions with funds provided by the Ghana Capacity 21 Programme.

3.6 The Desertification Fund

During the Regional tour of the NCD the committee took advantage to sensitize the various regional committees, heads of departments and NGOs on the need to set up a desertification fund and to discuss modalities for contributing to the fund at Regional and District levels.

3.7 NAP Preparation

Since Ghana had not elaborated its NAP, the major pre-occupation of the NCD has been to ensure the elaboration of the NAP, which has been unduly delayed for various reasons. The committee with assistance from the MES sourced funding (grant) from the World Bank through the Savanna Resources Management Project for enabling activities in the preparation of the NAP.

In collaboration with the NAP secretariat, which is located in the EPA, the committee assisted in providing a programme and budget for the preparatory process of the NAP as well as the terms of reference for the consultants who put the NAP document together. A NAP coordinating committee was also set up within the EPA to plan and supervise the NAP preparation process from the District to the National level consultations and workshops.

The National Committee on Desertification and the lead agency (EPA) for the implementation of the Convention to Combat Desertification and Drought drew out the programme and budget for the various consultative meetings and workshops. They also provided the TOR for the consultants who put the document together.

3.8 The National Focal-Point (NFP) to the UNCCD

The NFP is now a woman Deputy Director with the EPA based in Upper East Region, one of the regions seriously threatened by desertification and drought. She also manages the Desertification Control Unit based in Bolgatanga. Although relatively new she has already attended two COPs and a number of international meetings on Desertification, which have all helped to provide necessary experiences to enhance her work. She has therefore been active in the activities leading to the NAP preparation. With the support of the UNCCD secretariat, she initiated the consultative process for Canada to become Ghana's *Chef de File*. She also sourced for funds from the UNCCD secretariat for the organization of the National Validation workshop on NAP in Accra (14th-15th February 2002).

3.9 The National NGO Focal Point to the UNCCD

Represented by the Friends of the Earth (Ghana) was also active in organizing an NGO/Civil Society workshop to sensitize the civil society and NGO representatives in the three Northern Regions mostly prone to desertification. The forum-enabled participants to become better

informed about the convention, relevant NGO contribution towards combating desertification and to make inputs into the NAP preparation from NGO/civil society perspectives.

3.10 Regional Committee on Desertification and Drought

A Regional Committee on Desertification and Drought has been established in the three Northern regions (Northern, Upper East and West). These were jointly inaugurated during the celebration of the World Day to Combat Desertification held in June 2000 at Bongo in the Upper-East Region.

The RCD is an Inter-disciplinary Committee of 11 – 15 members consisting of regional heads of departments and organizations such as the EPA, Forestry Services Division, MOFA, Ghana National fire Service, NGOs, Private Sector women Organizations, The Regional Planning and Coordinating Unit, The District assemblies and Traditional Authorities.

The main functions of these Regional Committees are mainly for advising, coordinating and providing technical backstopping to efforts at combating desertification and drought in the respective regions for the NCD and Regional Coordinating Councils.

With the formation of Regional Committees on Desertification, the main criticisms that the NCD is out of touch with realities on the ground in the areas affected by Desertification and drought will be resolved as issues from the Districts and Regions on the implementation of CCD can now reach the National Committee through reports or minutes of the Regional Committee meetings and activities.

At the District level there already exist District Environmental Management Committees (DEMCs) made up of Assembly members, relevant environmentally related decentralized departments, NGO/CBOs who will assist to formulate local policies, programmes or enact local byelaws to protect the environment. These organizations are being mandated to coordinate, plan and implement activities to combat desertification and drought at the district level.

The DEMCs are empowered to form Community Environmental Committees at the Community level to take local action on land degradation and rehabilitation activities, control

of bushfires, and adoption of land and water management measures in farming activities. What are required now are relevant resources to enable these committees to undertake their planned activities and to build their capacities to function effectively. These two committees were very active during the consultative process and workshops organized in the Regions and Districts during the preparation of the NAP.

4.0 PARTICIPATORY PROCESS IN SUPPORT OF THE PREPARATION AND IMPLEMENTATION OF THE NATIONAL ACTION PROGRAMME

The participatory process for the preparation of the National Action Programme to Combat Desertification and drought as outlined by the UNCCD has been fully complied with and the

draft National Action Programme (NAP) report was discussed and validated in February 2002 at the National validation workshop.

The draft document is currently being finalized by the Consultants to be sent for Parliamentary approval and adoption.

The elaboration of the NAP was coordinated by the Ministry of Environment and Science, which also assisted in sourcing for funds through the Natural Resources Management Project funded by the World Bank and the UNCCD Secretariat, which provided US\$10,000 for the National Validation Workshop on the NAP.

In line with the country's decentralization policy and community involvement in the design and preparation of projects as well as the methodology agreed upon at the sub-regional level for drafting the NAP, the following participatory activities were pursued: -

The preparation of the NAP included an initial review of the 1987 National Plan of Action to Combat Desertification. In addition:

- Stakeholders were identified and involved in the preparation of the National Action programme.
- Sensitization meetings were held with stakeholders at the community and district levels in all forty-nine (49) Districts in the Northern Regions and districts/communities in other regions at risk. Participants included: Traditional rulers, opinion leaders, youth groups, women's groups, Assemblies persons, district authorities, CBOs and NGOs.
- Stakeholder workshops were held in forty-nine (49) Districts in eight (8) Regions in the country in which two thousand, four hundred and fifty (2,450) people participated.
- Stakeholder workshops were held in nine (9) Regions where four hundred (400) people participated. The participants include: Relevant decentralized departments, NGOs, CBOs, civil society organizations, Women's representatives, youth, traditional rulers, District Assemblies personnel and community groups.

- Recruitment of a Team of Consultants to put together the NAP; taking into consideration inputs from the District, Regional and National workshops.
- A two (2)-day National Validation Workshop was held in Accra – 14th to 15th February 2002. Some of the stakeholders included Local Authorities, Community Based Organizations, Non-Governmental Organization, Sector Academic Institutions, Women’s Groups, Religious Organizations, Researchers, Parliamentarians, Policy Makers, Bilateral and Multilateral Donors, etc.
- The Consultants are in the process of finalizing the NAP and the next stage is to present it to Parliament for consideration and adoption.
- Soon after the adoption of the NAP, Ghana will be organizing a Resource Mobilization Workshop.
- This will be followed by the implementation of the various plans, projects and programmes identified in the NAP.

Meanwhile, Government and non-governmental organizations, CBOs and other Community Groups have been requested to start preparing multi-sectoral or specific projects and programmes in the key areas identified under the NAP for possible consideration and support for the NAP implementation. This is where the technical committee on Desertification will prove very valuable in assessing proposals presented.

5.0 CONSULTATIVE AND PARTNERSHIP ARRANGEMENTS

With respect to partnership arrangement with developed country parties and other interested entities, very little interest has been expressed by other partners probably because Ghana has not yet completed preparing its NAP.

5.1 *Partnership Arrangements with Canada*

However, Ghana and Canada have started a consultative process through which the latter has agreed to be Ghana's *chef de file*. Meetings were held at various levels to identify the role of the *chef de file*. Also, no concrete forms of support or pledges have been received by Ghana towards the implementation of the NAP, which is due to be ready before the CRIG or next COP.

Other consultations are ongoing with CIDA through the Northern Savanna Biodiversity Conservation Project where the World Bank and GEF funders of the project will provide some support to the Desertification Control Unit located in Bolgatanga in the Upper East Region and Regional Office of the EPA in Northern and Upper West Regions to undertake the rehabilitation of five degraded areas as well as the conservation of 5 sacred groves in the 3 Regions.

5.2 *Other Partnership Arrangements*

- The NRMP/SRMP project funded by the World Bank, IDA, DANIDA and the Government of Ghana provided Funds for the preparation of the NAP. They also provided funds under the two projects under NAP.
- The Canadian initiative through CIDA is supporting food security programmes in the northeastern corner of the Northern Region as well as support for the water sector in the Northern part of the country.
- The UNDP at the National validation workshop expressed interest in supporting aspects of the NAP implementation when the document is finally adopted
- The Integrated Volta Basin Project. This is a project that will integrate the management of water resources in the six neighboring West African Countries (Ghana, Benin, Togo, La Cote D'Ivoire, Mali and Burkina Faso). Critical activities to be looked at that will affect the basin are farming activities along the catchments areas.

Ghana continues to actively participate in Sub-Regional and Regional programmes organised by CILSS and ECOWAS, supported by the UNCCD Secretariat. These meetings also provided platforms for consultations and negotiations on possible partnerships in future.

6.0 MEASURES TAKEN OR PLANNED, INCLUDING MEASURES TO IMPROVE THE ECONOMIC ENVIRONMENT, TO CONSERVE NATURAL RESOURCES, TO IMPROVE INSTITUTIONAL ORGANISATION, TO IMPROVE KNOWLEDGE OF DESERTIFICATION AND TO MONITOR AND ASSESS THE EFFECTS OF DROUGHT

6.1 In the first National Report, a number of measures planned to improve economic environment, to conserve natural resources and improve institutional organization and improve knowledge of desertification were outlined and need to be modified or upgraded to reflect current trends in the implementation of these measures as well as other ongoing or new initiatives. Some of these, which were mentioned in the previous report but are on going have been updated under the same headings while other new measures taken since the last report are highlighted as well.

6.1 *The Natural Resource Management Programme (NRMP)*

The Natural Resource Management programme (NRMP) is still on going with its main objective being to protect, rehabilitate and sustainably manage Ghana's land, forest and wild life resources and to sustainably increase income for the rural communities who own the resources.

Some of the main components of the NRMP, which are located in the desertification prone areas, have made significant achievements since the last report. These include;

- i) Savanna resource management;
- ii) Wild life resources management;
- iii) Biodiversity conservation;

6.1.1 *Savanna Resources Management Programme (SRMP)*

Several interventions are on going in the project's twelve (12) pilot communities within the three northern regions of Ghana. These are:

6.1.1.1 *Integrated Watershed Management:* Management plans for integrated watershed management of six (6) pilot Off-Reserve areas in the three Northern Regions have been developed. Management plans for pilot reserves in the three Northern Regions are also being developed.

i. *The Establishment of Community Natural Regeneration Plots:* In this case communities are encouraged to demarcate and set aside an area of vegetation for conscious protection from fire and unsustainable exploitation. Quite apart from getting grass/thatch to roof their buildings, the communities derive a lot of other tangible and intangible benefits from the natural regeneration plots.

ii. Over Seeding of Stylosanthes In Severely Degraded Areas: This intervention involves the seeding and planting of areas that have been severely degraded as a result of livestock feeding/over-grazing with stylosanthes and mucuna. These two plants are leguminous and also have the added advantage of out-competing weeds and other undesirable plants on degraded lands.

Being leguminous, these two plants are able to replenish the soil with the critical nitrogen that is necessary for proper plant growth. Both plants are also very palatable and nutritious in terms of their use for livestock feeding/grazing.

iii. The Management And Protection Of Water Bodies: The objective of this programme is to reduce the rate of silting and pollution as well as to improve the quality and quantity of water in the water bodies. Activities being undertaken under this programme include planting tree seedlings around water bodies, stone placement (stone building) around dugouts and the rehabilitation (removal of water weeds from the dugouts) of dugouts.

iv. Sustainable Woodlot Development and Use: the Traditional Energy Unit within the Savanna Resource Management Project managed this. The object of this programme is to ensure the efficient and reliable production and use of fuel wood in the savanna zone of Ghana. This programme basically involves issues relating to efficient and sustainable harvesting of fuel wood and charcoal production. The programme also involves the efficient use of these above energy sources as well as a massive woodlot development programme. Management plans for Traditional Energy Unit's pilot community reserves are also being developed.

v. Erosion Control Activities Within Settlements: This programme involves the planting of trees (especially, fruit trees) within settlements to serve as food, sources of income and to serve as windbreaks as well as stabilizing the soil against erosion. Stone bunding and pegging activities are also undertaken directly to control erosion in settlements.

These are all appropriate low-input technologies that could be replicated in the desertification prone areas to address land degradation.

6.1.2 The Northern Savanna Biodiversity Conservation Project (NSBCP)

This is designed with the primary objective of improving the environment, livelihoods and health of the people of Northern Savanna Zone of Ghana through the conservation and sustainable use of natural resources. Specifically, the project aims at the optimal use of the savanna ecosystem: to restore and conserve agro-biodiversity, medicinal plants, wood fuel, bush meat and grazing lands-and-sustain poverty alleviation.

NSBCP will support ecological activities such as the rehabilitation and restoration of degraded areas (on and off-reserve) with indigenous tree and medicinal plant species; the establishment and cultivation of field gene banks (ex-situ conservation) with medicinal plant species, herbs, spices and long abandoned farmer crop varieties in community-dedicated reserves and in species-rich home gardens. Where appropriate and suitable the project will restock savanna habitats with animal species, which are not foreign to the areas.

The project seeks therefore, to tackle the issue of conservation of bio-diversity in the Northern savanna with vital components and cross-links to land degradation and desertification, which are the key natural resource management issues in Ghana.

6.2 The Ghana Environmental Resources Management Project

Even though the GERMP ended officially in December 1996, its key achievement and lessons learned during its implementation continue to empower the EPA and other stakeholders who implemented the project to continue to pursue relevant sustainable environmental and natural resources management activities.

Some of the current activities in relation to the CCD.

6.2.1 Capacity building: EPA's presence in all ten administrative regions of Ghana has been firmly established. The regional offices are equipped and operating with facilities such as audio-visuals, monitoring equipment and libraries. These have proved valuable in awareness creation on desertification and drought at the Regional level.

One of the main activities in the regions is environmental education. Most of its rural outreach and school programmes concentrate more on land degradation and rehabilitation

issues and field activities. EPA regional offices have assisted the 110 District assemblies to prepare their local Environmental Action Plans. Including actions to arrests land degradation (control bushfires and deforestation).

Guidelines for District Environmental Management committees of the District Assemblies have been prepare and distributed. Substantial investment was made in developing human resources capability within the EPA and other participating institutions. However, the monitoring and enforcement capacity at the regional and local levels remains a challenge. Provision for the need for Environmental Impact Assessment (EIA) has been translated into detailed regulations on EIA, some development projects that have negative impacts on the environmental are now subject to EIA.

6.2.2 Land and Water Management

A Land and Water Management Unit has been established in the Ministry of Food Agricultural and merged with the Agro-forestry Unit of the Ministry. Training for Ministry field agricultural extension agents has been carried out on appropriate tillage and land preparation methods. NGOs have been actively involved in the education of farmers on the use of drought power. The participatory approach of the land management component was successful and met with acceptance from the communities, although the level of community acceptance and project impact was highest in the savanna agro-ecological zone, where LWM is still ongoing among farmers due to its relevance.

6.2.3 Environmental Information System Development (EISD)

A network of EISD agencies has been established and operationalised. EPA and other execution agencies are now well equipped to access data and information although EIS data is yet to be translated into more effective resource management practices. Map production capability has been enhanced considerably under GERMP. The Survey Department completed digital topographic map covering the whole of Ghana, required as a basis for all natural resource and environmental information development.

Procedures for colour printing of thematic maps have also been developed and land use/land cover maps covering the whole country have been developed by the Remote sensing Applications Unit (RSAU) of University of Ghana.

A strong Geographic Information system (GIS) has been established and is operating with the Soil Research Institute and has strong potential for use in providing relevant information for combating desertification. Finally, the Meteorological Service Department (MSD) made progress and completed the data entry and digitization of all its historic records and backlogged meteorological data dating back to the year 1900. The MSD has also now acquired modern equipment and thus are able to predict more accurately adverse weather conditions.

6.3 *Rural Poverty Reduction in Northern Ghana.*

The overriding aim of Government is the reduction of poverty through economic growth. Integrated rural development, expansion of employment opportunities, and improved access by the poor to basic public services.

Given that the majority of the poor are small-scale farming families, major emphasis is placed on broad-based agricultural development. Government's accelerated growth and development strategy aims to increase agricultural growth to 5-6% annually by improving access to markets, technology, and financial services, as well as improving rural infrastructure, human resources and institutional capacity.

Government's proposals for implementing this strategy are expressed in the Agricultural Services Sector Investment Programme (AgSSIP) and a Programme Fund for Micro-Finance. While the central and regional levels of MOFA are expected to play a key role in the coordination and monitoring of AgSSIP, responsibility for planning and managing implementation has been devolved to the District Assemblies, participatory approaches and promotion of both men's and women's groups are being used to empower farming families and increase their access to services.

Decentralization of fiscal, administrative, and development responsibilities to the District Assemblies are well advanced. Each District Assembly has a district development Common Fund into which central government allocates a portion of the total national revenue for development purposes.

6.4 *IFAD Projects*

IFAD has two ongoing projects in the Upper East and West Regions. Land Conservation and Smallholder Rehabilitation Project (LACOSREP II). LACOSREP II is to empower rural populations living in poverty to use opportunities provided by the Project to access improved technology services and credit in order to increase and stabilize their farm incomes through irrigation, improved technology and income generating activities and develop their social infrastructure to improve their living conditions and environment. The Upper West Agricultural Development Programme (UWADEP) located in the Upper West Region has similar functions as above.

In Northern Region, the Smallholder Rehabilitation and Development Programme (SRDP), which ended in 1996, has been continued by government in five out of the 13 districts as the Smallholder Agricultural Development Programme (SADEP), with activities covering small ruminants, credit, support for women's training and income generating activities and dissemination of improved varieties under the (IFAD funded) National Root and Tuber Crop Improvement

Project. The SADEP experience provides a good example of capacity building and government commitment sustained after donor financing has ended.

6.5 Village Infrastructure Project (VIP)

The VIP seeks to develop rural water supplies, post-harvest activities and intermediate levels of rural transport. VIP is being implemented through the District Assemblies (DAs), with technical support from zonal project offices. VIP also provides considerable support for institutional strengthening to the DAs. After 18 months, plans for all 110 Districts in Ghana have been prepared.

6.6 Community Based Development Programme

Funded by UNICEF, which seeks to reduce malnutrition and mortality among children and women by improving the services provided and the planning capacity of the districts has been ongoing for 5 years and has gradually extended to 5 districts in Northern Region. The programme includes food security issues, health care, domestic water and sanitation.

6.7 CIDA Food Security Programme

The programme covering the three northern regions includes sector support and a number of specific projects. About 25% of the funding has been tentatively allocated to an integrated project for food security in the “eastern corridor”¹ of Northern Region, which includes community managed small scale irrigation, soil and water management, a small ruminants component, the supply of improved seeds and other farm inputs and the promotion of animal traction. Other aspects of the programme covering the three regions include support to research, seed production, small scale irrigation (possibly to the extent of 20% of the funding), capacity building for the extension services, and the development and promotion of agricultural processing and agricultural business units.

6.8 *The Northern Region Lowland Rice Project*

This is a collaborative project between the Ministry of Food and Agriculture (MOFA) in Ghana and the Agence Francaise Developpement (AFD) with duration of 5 years.

The project may be considered as the pilot phase of a program that ultimately aims at increasing the local supply of rice, which will meet the quality requirements of the market and at prices, which are competitive with imported rice. The immediate objectives of the project are to alleviate the main constraints to the development of inland valley rice production and to promote an improved, more intensive but sustainable production system, which will be economically attractive to farmers.

To overcome constraints to rice farming, the project will demonstrate the viability and profitability of rice production on a total of 1000 ha by small-scale farmers in three valleys: Kulda-Yarong (Damongo District) and Awry (Woriwori) and Sillum valleys. (Both in Tamale District)

In the development of an economically sustainable rice production system a number of coordinated activities are being supported by the project. One of these includes: The implementation of water management systems in valleys involving the construction of weirs and bunds.

Rice cultivation has been very popular with farmers as a cash crop earner: However, over the years, it has led to large tracks of land been degraded and abandoned after a few years of

cultivation. More sustainable practices in rice cultivation are found in the project, which can be adopted by MOFA for extension to other farmers.

6.9 The Renewable Energy Services Project

The project funded by the UNDP and GEF serves as a catalyst to a large-scale use of renewable technologies in the country.

The three-year pilot project on solar electrification is for rural, social and economic development and it is aimed at the rural communities, which are off the national electricity grid. The Pilot project is located in the East Mamprusi District of the Northern Region.

6.10 The DISCAP Project

The District Capacity Building project (DISCAP) is financed by the Canadian International Development Agency (CIDA) in Cooperation with the Ministry of Local Government and Rural Development of the Government of Ghana. The implementation period is 2001-2006. The goal of the DISCAP is to strengthen the capacity of local government bodies to manage water and sanitation resources in collaboration with NGOs and the private sector in 16 selected districts in the three Northern regions. Among other areas that the project would be supported are:

- i. Integrated water resources management approach; and
- ii. Water quality monitoring.

6.11 The Forestry Research Institute of Ghana (FORIG)

FORIG recently opened the northern savannah research center in Bolgatanga, whose priority programmes are in line with the Savannah Resource Management project (SRMP), namely; -

- a. Rehabilitate degraded savannah woodland;
- b. Tree plantation development within settlements;
- c. Tree improvement and seed technology;
- d. Water harvesting and technology;
- e. Biodiversity conservation.

The center has conducted trial plantations of exotic and indigenous species to test their suitability for mass planting. The species include Aecia aurichloriformis, Cassia siamea, Khaya senegalensis, Aecia seleriana, Aecia polyacantha and Eucalyptus species. Experimental plots of these species are located at Bawku in the Upper East Region.

The center has conducted studies into the coppiceability of some indigenous savanna firewood species: from 1999-2001. Conducted trial plantations of two indigenous tree species; Khaya senegalensis and Ceiba petandra to test their ability to produce industrial wood was established along the bank of the Red Volta in 2000.

The Institute is engaged in a collaborative research with the Natural Resource Institute of U.K and MOFA on the use of local plant materials in protecting grain storage systems in Northern Ghana.

6.12 Environmental Restoration Unit of the Irrigation

Company of Upper Region (ICOUR)

The largest irrigation schemes in Ghana are located in the Upper East Region, which is the most degraded part of the country. These schemes are managed by the Irrigation Company of Upper Region (ICOUR), which also runs an environmental restoration programme alongside. The programme started in 1988 against the background that even though tree cover in the irrigation areas (Vea and Tono) is less than 30% of the total land area, there is over-exploitation of trees and other vegetal resources, while natural vegetation does not regenerate fast enough to restore the ecological balance.

Non-irrigable lands lie bare and continued to be degraded through sheet and gully erosion, leading to fast sedimentation and salutation of the Vea and Tono reservoirs. ICOUR was therefore assisted by Ghana Capacity 21 Programme in 2000/2001 to plant 45,000 species of tree seedlings at Vea irrigation area in the Bolgatanga districts in the Upper East Region.

6.13 Forestry Services Division (FSD)

The Forestry Services Division of the Ministry of Lands and Forestry has over the years, reserved and set up a system of forest reserves, which have much relevance for desertification control. Besides a few cases of encroachment for mining and farming, these forest reserves have been successfully protected. In the dry savanna areas they have continued to prove quite crucial for environmental protection with regard to soil, water and wildlife conservation.

The Forestry Services Division has provided leadership in the national tree-planting programme through public education, technical advice and supply of seeds and seedlings to members of the public, institutions and individuals desirous of planting any kind of tree seedlings. Many communities now own nurseries and receive regular advice and support in the form of nursery tools from the Division.

6.14 National Forest Plantation Programme

The President of Ghana recently launched a National Forest Plantation Programme. The coverage in the entire country is 20,000 hectares a year with the objective to keep pace with the current rate of deforestation, which is proceeding at 22,000 hectares per year. The three northern regions have in all 2,000 hectares to plant and protect in a year. If this is vigorously pursued and supported, it could lead to a reasonable level of rehabilitation of our degraded lands. A forest plantation Development fund has been created by the Ministry of Lands and Forestry where individuals, groups, communities, NGOs and ministries/department/Agencies could source for funding to implement activities related to land degradation.

6.15 Ministry of Food and Agriculture (MOFA)

MOFA has in recent years reformed its structures at the regional and district levels by abolishing the separate units (i.e. Animal Production, Animal Health, Agricultural Extension, Crops Services, Engineering and Mechanization) and fusing these together into a single Department/Unit headed at the regional and district levels by the Regional Director of Agriculture and the District Director of Agriculture respectively.

Through this exercise of restructuring, MOFA hopes to achieve food security by increasing production whilst at the same time protecting land and water resources.

The Ministry still continues to adopt its agricultural development strategy as an agenda for sustained agricultural growth and development. The Medium-Term Agricultural Development Programme (MTADP) has subsumed the strategy that recognises issues like price deregulation, withdrawal of subsidies, privatization, and agricultural trade liberalization and production modernization.

The sector, in collaboration with other sectors and non-governmental organizations, are formulating policies on soil fertility enhancement and conservation to guide farming activities and resource harvesting in order to ensure sustainable natural resources (land and water) management.

The Agro forestry Unit has established tree nurseries in all Regions of Ghana for the production of seedlings of various tree species for both demonstration and distribution to farmers.

6.16 *Improving Knowledge Of Desertification*

i Targeted Workshops, Seminars and Public Awareness

Ghana's efforts at providing knowledge among the broad mass of the population has been through a number of workshops, seminars and community/district durbars.

ii The World Day to Combat Desertification and Drought (WCDD)

One event that has made tremendous impact has been the yearly celebration of the World Day To Combat Desertification, which comes off on 17th June every year. This event which is coordinated and funded by the Ministry of Environment and Science (MES) and organized by the EPA is preceded by a national Broadcast on the National Radio and Television by the Minister of Environment and Science. There are also radio and newspapers commentaries on desertification and drought, which reach a wider Ghanaian public.

The climax of the celebration is organized in a rotational manner among the (Northern, Upper East and West) Regions that are mostly affected by Desertification and Drought. Each year a different district in the target region is chosen to organize the durbar of Chief and people including school children, youth groups, women's groups, decentralized departments, Environmental Committees, NGOs and CBOs.

The aim is to use the occasion to create awareness of the convention and educate the people on actions that cause desertification and drought and positive action to reverse the trend including, reforestation, soil erosion control and bushfires control. Institutional, Community and individual efforts to fight Land degradation are also recognized and rewarded on this great day.

iii World Environmental Day

On the World Environmental Day community programmes are organized around certain global or national themes every year to lay emphasis on key environmental problems and their solutions. Awareness of the general public, schools, communities and identifiable group

including women is created on some environmental issues of concern particularly land degradation. This is done through community durbars, school programmes and radio discussions.

6.17 Translation of CCD Document Into Local Languages

With the resources provided by Ghana Capacity 21 the Document on the CCD has been translated into 2 major languages in each of the affected regions. This was distributed to the Districts and Communities and the Functional Literacy department for use by learners in their schools.

6.18 Rural Outreach Programmes

The EPA, FSD, Ghana National Fire Service and NGOs/CBOs also undertake rural outreach programmes to communities to educate people on causes, effects and actions necessary at the community level to stop desertification.

Communities undertake community tree growing, woodlots and agro-forestry systems with technical assistance and seedling support from the FSD and other seed nurseries.

Radio discussions are also held in English and the major local Languages on aspects of desertification including a replay of recorded discussions in the field with the local people on radio.

6.19 Non-Governmental Organisations (NGOs) Collaborations

Measures to conserve natural resources and to improve knowledge of desertification are being carried out not only by organisations in the Government sector, but also by NGOs/CBOs and community groups. These NGOs and community groups and even individuals collaborate with and reinforce the efforts of the Government sector organizations.

6.20 Friends of the Earth (Ghana)

Friends of the Earth-Ghana (FOE-Ghana) are accredited to the UNCCD and are the Focal Point for RIOD, i.e., the International Network of NGOs working on Desertification and drought in Ghana.

Friends of the Earth-Ghana through its workshops and seminars, have brought together, several NGOs, Women's Groups, and other Civil Society Groups particularly, those in the desert prone regions (Northern Regions) of the country, and have disseminated, popularized and promoted the UNCCD and other national programmes and actions to Combat Desertification.

The education and awareness creation focused on women's land use rights, the UNCCD and the role of civil society in the UNCCD implementation, civil society participation in the elaboration of the NAP, National Desertification Fund (NDF) and sustainable land use practices among the desert prone communities.

6.21 Education and Awareness Creation

Friends of Earth-Ghana was very instrumental in awareness creation and capacity building for the civil society in desert prone communities during the process of Ghana's NAP preparation. Friends of the Earth-Ghana magazine "FOELINE" which is regularly published and widely distributed among civil society, NGOs, desertified communities and other relevant national and international agencies aided the FOE-Ghana's education and awareness process in the country.

At the International level, FOE-Ghana participated in Conferences of Parties (COPs) as RIOD UNCCD Focal Point for NGOs in Ghana where the Organisation took opportunity to lobby government delegations at the COP to take decisions that are pragmatic for effective implementation of the UNCCD in the affected countries, particularly Ghana and Africa. Back in Ghana, FOE-Ghana usually creates awareness on the COP meetings by informing Ghana NGOs civil society and other relevant bodies on the outcome of these meetings and future plans by sending reports on such conferences to these organizations.

6.22 Community Projects

As part of FOE-Ghana's measures to further promote community participation the management of dry land resources, particularly among women, two women's woodlot plantation projects were established in Wulugu, a desertified community in the West Mamprusi District of the Northern Region to help reduce pressure on the savannah resources and to provide fuelwood source for the women both for domestic use and for sale for income. The project has incorporated sheanut processing as a means of income generation and for

poverty reduction. Also, maize is to be bought in the bumper harvest and stored for use during the lean season to ensure food security in the community.

6.23 *Advocacy*

FOE-Ghana advocated for the government to undertake early preparation of the NAP as well as effective civil society involvement by the government in the elaboration of the NAP. It also lobbied for the enrollment of civil society experts on the National Roster of Experts, as well as setting up a National Desertification Fund without delay are still on-going.

Other NGOs and CBOs continue to undertake similar reforestation programmes, bushfire control activities, soil and degraded land restoration activities in the desertification prone areas.

6.24 *Institutional Training and Research*

Ghana has a wide range of training institutions that run courses on specific aspects of desertification. These institutions include the Regional Institute for Population Studies (RIPS) and the Department of Geography and Resource Development of the University of Ghana, the Institute of Renewable Natural Resources (IRNR) and the Faculty of Environmental and Development Studies of the University of Science and Technology, the Ghana School of Forestry, the University for Development Studies and the EPA training school at Amasaman near Accra.

The training institutions are backed up by an equally wide range of research organisations. These include the Soil Research Institute (SRI), the Water Research Institute (WRI), the Forestry Research Institute of Ghana (FORIG), the Savanna Agricultural Research Institute (SARI), the Remote Sensing Applications Unit (RSAU) and the Institute of Land Management and Development (ILMD). The RSAU does both training and research.

6.25 *Savannah Agricultural Research Institute (SARI)*

The SARI continuous to undertake a number of on-farm research that help in controlling or preventing land degradation or desertification. These are in areas of agro forestry, soil tillage, breeding, crop- livestock integration, cover crops, soil fertility and agro meteorology.

The institute continues to impart some of these technologies to farmers through extension staff of MOFA and NGOs.

7.0 FINANCIAL ALLOCATION FROM NATIONAL BUDGETS IN SUPPORT OF IMPLEMENTATION AS WELL AS FINANCIAL ASSISTANCE AND TECHNICAL CO-OPERATION RECEIVED AND NEEDED

No financial allocations have yet been made directly to support the implementation of the convention or the NAP. This may be mainly due to the fact that the NAP is not ready for implementation.

The Ghana Government however, provides the office accommodation and meeting place and pays the salaries and emoluments of persons currently coordinating the activities of the NDC and TCD. It also provides Transport and sitting allowances for members during meetings and field visits.

7.1 Funds from Central Government

Various Ministries, Department, and Agencies whose activities relate to combating desertification and mitigating the effect of drought are allocated funds on an annual basis for their operations. The Ministry of Environment and Science for instance, has the Environmental Protection Agency, The Council for Scientific and Industrial Research and its component Institutes (e.g. Crop Research Institute, Animal Research Institute, Soil Research Institute, Savannah Agricultural Research Institute, Forest Research Institute of Ghana, Water Research Institute,) playing various roles, which have relevance for desertification control.

For the 2002 financial year for example, the Government of Ghana made an allocation of ₵2,344,207,630 or \$311,227,684 for the overall development expenditure of the Ministry with which the Constituent Departments, Institutes and Agencies were to carry out their planned activities including desertification. The budget for the Ministry of Lands and Forestry, which is about equal to the above sum, is also provided by GOG.

The Government also allocates funds annually for the national and regional celebration of World Day to Combat Desertification and Drought and the World Environment Day which both fall in June every year.

7.2 A National Desertification Fund.

This has been duly registered with the Registrar General's Department where a certificate of incorporation has been issued. The Fund now has the legal mandate to operate as an entity. The board of directors will be inaugurated and the fund launched so that resources could be channelled to it for the NAP implementation activities.

Some initial awareness has been created on the Fund and possible sources of raising funds include the common Fund from Central Government to DAs, Community contributions, levies on natural resources, corporate organisations and industrial concerns.

For technical cooperation received see consultative and partnership agreements. However the full extent of technical cooperation that will be needed will be ascertained on the completion of NAP and after definite actions and projects are adopted.

8.0 REVIEW OF BENCHMARKS AND INDICATORS UTILISED TO MEASURE PROGRESS, AND AN ASSESSMENT THERE OF

Ghana still lacks any systematic benchmarks or indicators for assessing the implementation of the convention or the extent of desertification. Most of what is available are compartmentalised in various institutions or organisation for monitoring certain parameters of environmental change.

Since change is in relation to some previously existing state the first task for national resource and other environmental monitoring is to ascertain some baseline conditions for monitoring. It may be possible to use existing standards relating to the characteristics and quality of land resources and the environment, or, some desired levels of land and water quality.

Despite the fact that land degradation is a major problem, which affects the Agricultural potential of the country not much attention has been directed at the assessment of the various types of degradation. There seem to be no comprehensive plan for monitoring the rate and extent of land degradation even in the few cases where assessment has been carried out. Monitoring plan is therefore a pre-requisite for the planning of, for example sustainable land use systems. In this case there is urgent need for assessing and monitoring the extent of land degradation in the various agro-ecological zones as a means of planning and implementation of sustainable land-use systems.

During the NAP preparation process it became obvious that Benchmarks or indicators could not be set but will require some support as a first step to produce or obtain these indicators from relevant institutions and Agencies in whose files the information or data can be sourced to generate new data in areas such as:

Soil Quality Change, Vegetative Quality and land use change, fauna, Climate, Water, Socio-economic and socio-cultural indicators as indicators for desertification and drought.

Institutions like the Soil Research, Crop Research, Agricultural Research, Universities, the Water Research Institute and EPA could be tasked to continue to produce and make available relevant baseline information, benchmarks and indicators in a comprehensive form for monitoring the implementation of the CCD and the extent of desertification and drought in the country.

In the case of national sustainable development, a National Committee has been established to develop benchmarks and indicators that would be used to measure progress in the implementation of the National Sustainable Agenda. When developed some of these could be applied to measure some desertification activities in relation to Socio-economic parameters.

Other indicators to be established by the various actors in the preparation of the NAP will be utilised for the monitoring and evaluation of the programme activities.

9.0 CONCLUSION

Among the environmental problems facing Ghana is desertification, which is caused by factors such as deforestation, soil erosion, bush burning and inappropriate agricultural practices.

Land degradation or desertification continues to be the most serious environmental problems facing Ghana. Its causative factors such as deforestation, soil erosion, bush burning inappropriate farming practices occur at alarming rates.

The government of Ghana recognizes that generally, environmental degradation is occurring in the country as a result of the boost given to economic activities by the Economic Recovery Programme (ERP). Measures have therefore been put in place in recent years to stem the tide of environmental degradation. A new Ministry of Environment and Science (MES) has been established and the Environmental Protection Council has been transformed into an Agency (Environmental Protection Agency) with enforcement and regulatory powers. MES, and EPA work in collaboration with other Government and Non-Governmental organisations for purposes of protecting the environment, including desertification control activities.

In 1988, the Government of Ghana initiated a major effort to put environmental issues on the priority agenda. The exercise culminated in the preparation of a strategy document - the Environmental Action Plan - to address the key issues relating to the protection of the environment and to ensure better management of natural resources. The EAP provides a coherent framework for interventions deemed necessary for safeguarding the environment.

In line with its obligations under the convention to Combat Desertification, Ghana has now elaborated its NAP and has validated it at a national workshop. It is being finalised by the consultants for parliamentary approval and adoption.

Ghana needs financial and technical support from bilateral and multilateral partners to be able to bring all the on-going activities, and many others yet to be planned, along lines of the U.N. Convention to Combat Desertification.

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