

**National Progress Report on the
Implementation of the UNCCD in The Sudan**
(Covering the period between 2002-2004)

Prepared by

The Government of The Sudan

Submitted to

**UNCCD Secretariat
Bonn, Germany**

**Khartoum
September 2004**

Table of Contents

Table of Contents	2
Acronyms and Abbreviations	4
Preface	6
Summary	7
Introduction	13
A. Strategies and Priorities Established within the Framework of Sustainable Development Plans and Policies	14
1. Sudan’s main objectives and priorities for achieving sustainable Development	14
2. Institutional measures taken to implement the CCD	14
B. Effectiveness of the participatory processes in the formulation and implementation of the NAP and its related activities	18
B-1. The current trend of the participatory processes in relation to the NAP framework	19
B-2. Women and private sector are on board	24
B-3. Capacities needed to maintain a mechanism for active involvement of stakeholders (at local and national levels)	26
B-4. Criteria used for selecting actors in national priority identification process	26
B-5. Scientific community representation and role in monitoring	27
B-6. Utilization of a traditional knowledge system	27
B-7. Established linkages with educational centers to promote environmental education	28
B-8. Mechanisms adopted to ensure that actors are involved in information provision	28
B-9. Participatory awareness campaigns themes	28
B-10. Consultative process in support of the preparation and implementation of national action programs	29
C. Measures taken or planned within the framework of National Action Programme	29
C-1. Past experience	30
C-2. NAP recommended actions for combating desertification and mitigating its effects	19
C-3. Programmes and projects proposed within the framework of NAP	30
C-4. Activities complying with priority fields set out in	

	the convention	30
C-5.	List of workshops conducted in 2003	37
C-6.	Research	38
D.	Economic performance during the period 2002-2003	27
D-1.	Macroeconomic indicators	38
D-1.1.	Sustainable growth rate of GDP	38
D-1.2.	Reduction of inflation rate	39
D-1.3.	Stabilization of exchange rate	39
D-1.4.	Balance of payment	39
D-1.5.	Poverty alleviation and social development	39
D-2.	The Agriculture sector	40
D-3.	Financial allocations from national budget	41
D-4.	Current Budget	42
D-5.	The role of States	42
D-6.	Agriculture finance and Credit	42
D-7.	Contribution of International institutions to the process of poverty alleviation	42
D-8.	Concluding Remarks	42
Appendix – 1		44

Acronyms and Abbreviations

ACSAD	Arab Center for the Studies of Arid Zones and Drylands
ADS	Area Development Schemes
CBOs	Community-Based Organizations
CBS	Central Bureau of Statistics
CSOs	Civil Society Organizations
DADCSI	Desertification and Desert Cultivation Studies Institute
DNPP	Dinder National Park Project
EMC	Environmental Monitoring and Compliance
EU	European Union
FNC	Forests National Corporation
GDP	Growth Domestic Product
GEF	Global Environment Facility
GIS	Geographical Information System
GoS	Government of Sudan
HCENR	Higher Council for Environment and Natural Resources
HEA	Household Economy Analysis
IES	Institute for Environmental Studies
IFAD	International Fund for Agricultural Development
IGAD	Inter-Governmental Authority for Drought
IPRSP	Interim Poverty Reduction Strategy and Action Plan
JAM	Joint Assessment Mission
KARP	Khor Arbaat Rehabilitation Program
MAPRI	Medicinal and Aromatic Plants Research Institute
MoAF	Ministry of Agriculture and Forestry
MoFNE	Ministry of Finance and National Economy
NAP	National Action Programme
NBSAP	National Biodiversity Strategy and Action Plan
NCB	National Coordinating Body
NCR	National Centre for Research
NCS	National Comprehensive Strategy
NDDCU	National Drought and Desertification Control Unit
NFP	National Focal Point
NGOs	Non-Governmental Organizations
NSDS	National Sustainable Development Strategy
RPA	Range and Pasture Administration
SC	Save the Children
SCSNAP	Sudanese Civil Society Network for Alleviation of Poverty
SDA	Sudanese Development Association
SECS	Sudanese Environment Conservation Society
SRC	Sudanese Red Crescent

UNCCD	United Nations Convention on Combating Desertification
UNDP	United Nations Development Programme
UNESCO	United Nations for Education, Science and Culture Organization
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
VDCs	Village Development Committees
VES	Village Extension Service
WCGA	Wildlife Conservation General Administration
WFP	World Food Program
WHO	World Health Organization

Preface

Sudan with its large area and diversified ecosystems reflects different types of land use. The intensive use of the available natural resources has led to the appearance of the problem of desertification. In Sudan, desertification is regarded as the first environmental threat that poses a real constraint to achieving sustainable agricultural development of drylands.

Since the year 2000, UNCCD Secretariat has organized a two-year meeting for reviewing progress on the implementation of UNCCD. The previous reports (2000/2002) were prepared by the national focal point. The main outcome shown by the last one (2002) was the drafting of the national action programme and the ban on use of fuelwood by traditional and conventional bakeries.

This report which is the third on the list has been prepared by a group of six consultants. Thanks to the UNCCD Secretariat for the financial support. The National Focal Point feels deeply indebted to the technical assistance provided by the Drought Monitoring Centre of Nairobi for the preparation of the Country Profile.

Summary

- Sudan is the largest country in Africa with an area of 2.5 million km² and is bordered by nine African States. This area lies between 4-22 °N and 22-38°E. These are Egypt, Eritrea, Ethiopia, Kenya, Uganda, Congo, Central African Republic, Chad and Libya. Additionally, the Sudan has over seven hundred kilometers along the Red Sea Coast. The country is inhabited by just over 30 million persons according to the Central Bureau of Statistics (CBS, 1999). Ecologically, the country is diversified. Environmentally, the country ranges from desert in the north to semi-humid savanna and humid sub-tropical woodlands in the south. This wide range of variation is a result of climatic factors, particularly rainfall, together with soil variation leading to diversity in vegetation cover. In general, a gradual succession occurs from desert scrub in the north to low rainfall savannas in the south. The terrain is predominantly flat. Rock outcrops occur, occasionally, in the otherwise flat terrain. The Red Sea Hills in the east, Jebel Marra in the west, the Nuba Mountains in the centre and the Imatong Mountains in the south east are the only significant elevation. The altitude varies from 900-3,000 m. The river Nile system is the second most significant feature. It forms a prominent incision in the terrain. The rest of the terrain comprises vast clay plains in the centre and the south east. The western part of the country is stabilized sand dunes. South of latitude 10° the country is characterized by clay plains in its northern edges, the Upper Nile swamps, Bahr El Ghazal and Machar swamps and the undulating topography of the equatorial region.
- Attention to land desertification in Sudan was first drawn in the thirties of last century when the Soil Conservation Committee was formed and made its recommendations in 1944. The committee alerted that the cause of land degradation was the misuse of land resources. Sudan contributed to the effort to combat desertification; it was one of the first countries to sign UNCCD and formed the National Unit for Coordination of programmes to mitigate the effects of drought and to combat desertification in the Ministry of Agriculture and Forests.
- Sudan's main objectives and priorities for achieving sustainable development and harmonization of policies and strategies are spelt out in its National Comprehensive Strategy (NCS) (1992 – 2002). The issue of desertification control and protection of natural resources is frequently referred to in the NCS (1992-2002) and has been addressed by the president and concerned ministers. As a successor to NCS, the Sudan is formulating a 25 year strategy with broad visions to achieve different values and goals including rational use of natural resources.
- It has been well recognized that institutional measures need to be taken in order to implement the CCD. Similarly, the NAP has to be consistent with other national and social development and environmental protection plans. With such an understanding a national Action Plan (NAP) to combat desertification was completed in 1998 for 13 states classified as degraded. In the NAP formulation process, a bottom up approach was adopted and a series of workshops were organized both at state and national levels. Draft proposals from states and national workshops were synthesized to come up with a national action plan document. The policies formulated and activities implemented are sectoral and the

net result is the lack of comprehensive approach to combat desertification and poverty in degraded areas.

- The NAP considered involving and encouraging the private sector's participation in different ways such as by levying taxes on licenses of agricultural schemes, sale of animals and markets of crops to generate funds to combat desertification. In addition, to encourage private sector in projects related to natural resources protection, tax exemption was suggested. The NAP also attempted to adopt policies that oblige the existing national social funds to contribute from their resources to efforts of desertification control.
- The NAP did not ignore the linkages with sub-regional and regional action programmes (SRAPs and RAPs). However, and despite the efforts made by IGAD for sub-regional programmes, little has been achieved. Projects for regional cooperation were formulated but lacked funding for implementation. It is hoped that the Nile Basin Initiative will provide funds for the implementation of Transboundary Watershed management project involving Sudan and Ethiopia. This initiative does conform to the objectives of NAP.
- At the national level a National Drought and Desertification Control Unit (NDDCU) has been established since 1979, named Desert Encroachment Control Programme Office (DECARP Office). It was designated as a focal point for UNCCD by a ministerial decree in 1994. Then within the Ministry of Agriculture and Forestry (MoAF) as a national coordinating body (NCB). This NCB is attached to the Land Use Department giving it a lower status in the hierarchy of the Ministry of Agriculture. Under such circumstances its influence on matters of policy and legislation are limited. Its present status and links to the Ministry of Agriculture and Forestry represent the main obstacle to the unit to function as a NCB. It has a full-time secretariat with very limited staff and lacks financial resources. The present status and limited institutional and financial capacities cannot effectively promote synergistic developments for sustainable land management.
- There are more than 20 institutions concerned directly or indirectly with issues of desertification control. A coordinating Council formed from different sectoral departments was established and chaired by the Under Secretary, Ministry of Agriculture. This coordinating council was supposed to ensure the participation of the various stakeholders and to supervise the implementation of UNCCD. However, at present this coordinating council is not functioning and the NDDCU is totally merged in the Ministry of Agriculture. Despite the above statements, the NCB, in the process of fulfilling its mandate, created links and communication channels with relevant institutions to conduct studies or to be involved in the NAP process. These are based on ad hoc procedures. As the NCB lacks capacities in aspects of coordination and information system, there is a strong need to build capacities
- Prior to 1970, environmental legislation was primarily concerned with conservation of natural resources and generally neglecting impacts of activities on human beings. After 1992, legislations have become more concerned with management, protection and use of natural resources in a sustainable manner.

Laws and regulations also began to incorporate international standards and commitments. These efforts materialized in 2000 in the adoption of Sudan's Environment Act. The Act represents a great leap forward in the way towards harmonizing the different sectoral environmental laws. The Environmental Act is supported by statements in Sudan's 1998 constitution. In order to improve law enforcement, the capacities of the Higher Council for Environment and natural resources (HCENR) must be upgraded. In this aspect, an Environmental Monitoring and compliance Department (EMC) must be established. This department must include trained staff to perform inspection, monitoring and audits. The issues of land tenure are complex in the Sudan. Land acts of Sudan are concerned with land tenure rather than land use. Land Act of 1970 deems all unregistered land which is about 80% of Sudan's area as government land with usufruct rights by the local communities.

- Methods of participation of various actors in occasional consultations include meetings, use of national media (newspapers, radio and television) mainly to raise awareness, and to disseminate information. Limited extension work was conducted by Forests National Corporation (FNC) and the Ministry of Agriculture and Forestry (MoAF). National NGOs conducted several activities which involved consultations with CBOs and meant to include them in the planning process. The FNC could be credited as the most active government institution leading in conduction of awareness campaigns, workshops and public meetings In 2003 the FNC conducted 235 workshops and public meetings and made 945 extension visits and produced 436 Radio and TV programs. The FNC involved CBOs, national and international NGOs, and involved women and youth groups in its activities. While the FNC activities could be described as top-down oriented, nevertheless they incorporated considerable consultations and participation from CBOs, and NGOs. The Sudanese Environment Conservation Society (SECS) could be signaled as the leading NGO conducting a participatory process in support of implementation of the NAP related activities. SECS first strategy 1992 – 2002 specified the desertification problem as the major environmental problem in the Sudan. SECS housed the national NCCD for NGOs and acted as focal point for network of 100 branches located in more than 13 states. Sudan is involved in a participatory process towards adoption of Interim Poverty Reduction Strategy Plan (IPRSP) during the period 2002-2003. Capacity limitations of both government and civil society organizations are evident. Inadequate institutional and human capacity is evident as reflected in poor data base, insufficient poverty diagnostic and limited capacities in costing, budgeting and Public Finance Management.
- The experiences of the UNDP projects of Area Development Schemes (ADS) sponsored by UNDP US 39,000,000 targeting 1,200,000 persons mainly in drought hit areas. The ADS experiences provided useful models and practices to be pursued. Also elements of success and failure were well studied.
- The Dinder National Park Development Project (DNPP), a project that is funded by the Global Environment Facility (GEF) through the United Nations Development Programme (UNDP) is being implemented by the government's Higher Council for Environment and Natural Resources (HCENR) and The Wildlife Conservation General Administration (WCGA). The project, benefiting from the ADS's experiences is establishing about 30 VDCs among the

communities surrounding the Dinder Park. The DNPP main objectives are conservation of biodiversity of the park and integration of the surrounding communities in the conservation and sustainable use of biodiversity in the park through the application of concepts of Biosphere Reserves management.

- Participatory efforts in afforestation activities were led by FNC which in 2002 organized seed broadcasting in 50485 feddans, disseminated 2,080,433 tree seedlings, established 245 community forests covering 128,490 feddans and led tree planting campaigns in 2604 public buildings and areas. The above participatory program included several CBOs and NGOs and was implemented in more than 13 states. The FNC with sponsorship from United Nations High Commissioner for Refugees UNHCR was able to rehabilitate 4460 feddans of forest, which was destroyed by refugees in Kassala and Gedarif State. FNC has formed about 543 Gum Producers Association with the aim of improving their organizational and managerial skills in managing their tree resources and improve their skill in gum production and marketing. Management of gum gardens by local communities represents one effective means of combating desertification since the Acacia tree that produces the gum extends throughout the semi-arid zone in a form of a belt from eastern to western parts of the country. The gum belt also represents the first defense line in stopping the encroachment of moving sands southwards.
- Introduction of butane gas as an alternative source of domestic energy requires the acceptance of the community, and also requires the provision of stoves and cylinders and a sustainable source for refilling the cylinders at affordable prices. The FNC established what is called (Ghabat Gas) to address the above-mentioned issues and targeting 50% reduction of biomass use in 3 to 5 years. In 2002, the FNC succeeded in distributing a total of 86,697 stoves and gas cylinders in 16 states.
- Food security especially in Darfur has been a matter of great concern to NGOs, donors and community, Save the Children (SC-UK) is the focal point for food security monitoring in Darfur extending services to main Early Warning players (OXFAM, WFP and relevant Government Departments). The program, which is supported by the European Union, is including: Household economy baseline information, capacity building on Household Economy Analysis (HEA), conduction of team works in collaboration and participation with government and community group. SC (UK) produces regular surveys in collaboration with Food and Water Emergency Committee of North Darfur. These surveys produced estimates of food gaps (for example for 2003 estimated as 10389 MT in Northern Darfur).
- Women are participating in the activities of several NGOs and have considerable contributions to activities related to the NAP process. The UNDP-ADS Committees included women members for most of their committee and also included several development activities for women. Women Communal Woodlots established within the forestry extension program in the River Nile and Kassala States are good examples of women's participation in combating desertification.

- The private sector is not directly involved in the NAP related activities and programs, however, indirect involvement of the private sector could, for example, be in land-use and Natural Resources-based conflicts resolution, in alternative energy provision of materials. The Acacia Company (previously known as Jandail) has contributed to afforestation activities in Kordofan (50000 feddans) is one good example of the involvement of the private sector in the drylands afforestation and drylands management, hence, it adds to national efforts in combating desertification.
- The scientific community was well represented and has played a significant role in matters such as monitoring. Geographical Information System (GIS) had been used to compile data and information in the early 1990s. The process requires continuous updating and improvement. A UNESCO Chair in desertification established in 2003 and it is affiliated to the University of Khartoum. The UNESCO Chair together with the Desert Cultivation Studies Institute (DADCSI) are planning to establish an information network. Research Programs were conducted by Institute of Environmental Studies (IES) Dryland Husbandry Program and by the National Council for Research (NCR) in Rawakeeb area west of Omdurman. However, results are not linked to specific monitoring programs. Some documentation on traditional knowledge in Sudan has been carried by the Afro-Asian Institute (U of K) and the Medicinal and Aromatic Plants Research Institute (MAPRI) of the National Centre for Research (NCR). The first National Report included recommendation to establish a national mechanism for study and analysis of traditional knowledge to be integrated in NAP related research and activities. Furthermore, linkages with educational centers to promote environmental education have been initiated with the University of Khartoum and Bakht El Roda University. Curricula containing desertification have been incorporated into primary and secondary education levels.
- Participatory awareness campaigns included many themes dealing with different issues of desertification e.g. growing threat to ecosystems and sustainable livelihood under a scenario of extreme climatic events, advocacy for participatory rural development as key element in poverty eradication, the widespread downstream geopolitical consequences of phenomena such as forced migration and conflicts, prevention of land degradation and dissemination of lessons learned and best practices.
- Economic policies in Sudan were based on the National Comprehensive strategy (NCS), which covered the period 1992-2002. During the period (1990-2004) the Government of Sudan adopted economic policies which were put to bring socio-economic structural change through liberalization of the economy and formulation of strategies and plans. The programs and budget targeted, sustainable growth rate of GDP, reduction of inflation rate, stabilization of exchange rate, balance of payment, poverty alleviation and social development. The agricultural sector remains the main source of income and employment. In Sudan the vast majority of the poor live in rural areas earn their living from small-scale agriculture. The GoS targeted about SDD 62742.7 million during the period 2002-2003. The actual payments amounted to SDD 50429.9 million constituting 80 percent of the estimated allocation.

- Drought and desertification affected 13 of the 26 states in Sudan; these are El Gedarif, White Nile, North Kordofan, Western Kordofan, Southern Kordofan, Northern Darfur, Western Darfur and Southern Darfur. The Constitution of 1998 lists the responsibilities of respective ranks of the government. The states and localities main responsibilities include social need. The state governments with collaboration and support of the federal government focus its development efforts to mitigating the effects of natural disaster and poverty alleviation. The federal government passed its support through the National State Support Fund.
- Several international United Nations agencies and institutions have contributed to the process of poverty alleviation. UNDP signed the country program's document to provide USD 22.9 million during the period 2002-2006. The contribution will cover two out of six projects directly targeting the beneficiaries. UNIFPA signed a country program to provide USD 13.5 million during the period 2002-2006. The program targeted productive women, population strategies and policies. UNCIEF signed a country program to provide U\$100 million to implement projects aimed at reducing mortality of infants and children under five years mortality and facilitating access of girls and pastoralists education.
- It could be concluded that even though no national plan for combating desertification in the Sudan is officially adopted, the activities carried out constituted a move towards natural resource conservation through the revision of legislation and institutional re-organization. Forests and other renewable natural resources law passed by the National Assembly in November 2003 included other natural resources in addition to forests, which had a law since 1932, for the first time. The law gave room to civil society organizations and private sector to participate in the conservation and sustainable management of natural resources. It also tried to integrate the natural resources units in one corporation to enhance joint integrated work but the law has not been applied in this respect for financial and administrative reasons.
- There are also several constraints, which need to be overcome before better implementation of the NAP is ensured. The most basic difficulty facing the traditional sector is the weak database and lack of information. Most of the data are based on observations and judgment. It is very difficult to quantify neither the symptom nor the measures to be taken by the government to solve the problems. Lack of coordination between government institutions involved in efforts to reverse the effects of drought and desertification is major factor limiting the effects of these efforts. On the other hand, the national and international NGO's are concentrating their activities targeting these areas, but their efforts are still fragmented and lack coordination among themselves as NGOs or with the government institutions playing the same role. A specific unit for combating efforts of drought and desertification was established, but it is handicapped by weak TOR and limited facilities. The civil war and the tribal conflicts aggravated the problems of the affected communities.

Introduction

The Sudan is a vast country extending gradually from the desert in the north, with hot dry climate and with very little vegetative cover, to the African sahel zone in the center, with light and dense Savanna, and to the sub-tropical region in the south with heavier rains and dense tree cover. This endows the country with various environments and different agricultural systems. Sudan has a total gross area of 2.5 million km² including desert and water bodies. This area lies between 4-22° N and 22-38° E. The span over 18 degrees of latitude has given Sudan its characteristic variety of environments and hence its variety of biological life. Sudan is administratively divided into 26 States.

The Sudanese terrain is predominantly flat. Rock outcrops occur, occasionally, in the otherwise flat terrain. The Red Sea Hills in the east, Jebel Marra in the west, the Nuba Mountains in the centre and the Imatong Mountains in the southeast are the only significant elevation. The altitude varies from 900-3,000 m. The river Nile system is the second most significant feature. It forms a prominent incision in the terrain. The rest of the terrain comprises vast clay plains in the centre and the southeast. The western part of the country is stabilized sand dunes. South of latitude 10° the country is characterized by clay plains in its northern edges, the Upper Nile swamps, Bahr El Ghazal and Machar swamps and the undulating topography of the equatorial region.

The Sudan is an Afro-Arab country well placed geographically, median among the Arab countries in North Africa, the Arab countries across the Red Sea and the countries of east, central and West Africa. In this respect, the country serves not only as a bridge facilitating trade and human movement, but also as a melting pot of African and Arab cultures. The country by size and diversity is Africa in miniature with complex cultural, ethnic and religious entities. With 2.5 million km² in area, Sudan is the largest African country. It enjoys extensive arable land, estimated at some 84 million hectares (ha) (1ha= 2.38 feddans) that can mostly be rain cultivated with rainfall varying from about 50 millimeters (mm) in the extreme north to more than 1500 mm in the extreme south. Thanks to the extensive rains, most of central and all southern Sudan are largely covered with forests and grasslands, estimated at some 66 million ha. The Nile River with its various tributaries crosses the country from the south to the north with an annual flow of some 84 milliard cubic meters (md.c.m.), Sudan's share of which is 18.5 md.c.m. at Aswan. The country is also well endowed with underground water, which has hardly been tapped, in addition to numerous seasonal rivers, Khors and wadies with estimated capacities of 750 milliard³ outside the Nile Valley, which need to be controlled and regulated to maximize their utilization. These natural resources have allowed the build-up of a national herd of livestock, estimated at some 130 million head of cattle, sheep, goats and camels (Ministry of Animal Wealth 2004), as well as several million wild animals. The Nile Valley and the Red Sea are also rich in fish and aquatic life constituting a tourist attraction in addition to their role in food security. The country is becoming well known for its rich mineral resources, which include oil, gold, iron, lead, chrome, asbestos...etc. Indeed 1600 kilometers of pipeline, Bashair Sea Port, Khartoum Refinery and other installations have been completed and the export of crude oil began on 30th August 1999.

A. Strategies and Priorities Established within the Framework of Sustainable Development Plans and Policies

1. Sudan's main objectives and priorities for achieving sustainable development

Sudan's main objectives and priorities for achieving sustainable development and harmonization of policies and strategies are spelt out in its National Comprehensive Strategy (NCS) (1992 – 2002). The NCS provided policy directives that the issues of sustainability must be embodied in any development activity. Following the issuance of NCS, a number of sectoral strategies were formulated in the fields of agriculture, water, biodiversity, forestry, climate change etc. Issues of natural resources protection and desertification control were reflected within all sectoral strategies planned for the NAP process.

As a successor to NCS, GoS has formulated a 25-year strategy with broad visions to achieve different targets and goals including rational use of natural resources. The 25 – year strategy would recognize the immediate challenges that need to be addressed. Among these challenges the concern for protecting natural resources. A joint effort has been made by HCENR and the National Council for Planning to upgrade the 25 year strategy into a sustainable development strategy. This has been done through the inclusion of the environmental dimension (three workshops were financed by Un Commission on Sustainable Development). However there is a need to harmonize the various sectoral strategies in a National Sustainable Development Strategy (NSDS). Hence, the process of formulating NSDS aimed to reconciling national plans and strategies and incorporating an Interim Poverty Reduction Strategy (IPRS). The IPRS tries to achieve the development of traditional agriculture, which represents one of the main NAP objectives.

The country also has formulated a National Biodiversity Strategy and Action Plan (NBSAP). The guiding principles of this strategy included most of the elements incorporated in NAP. These principles covered, protection of natural environment, halting and reversing the over-exploitation of biological resources through appropriate land use especially in marginal and areas affected by desertification. The NBSAP also recommended institutional arrangements to strengthen the capacities of institutions working in the field of natural resources and creation of mechanisms to ensure synergies.

2. Institutional measures taken to implement the CCD

a) Consistency of the NAP with other national and social development and environmental protection

A national Action Plan (NAP) to combat desertification was completed in 1998 for 13 states classified as degraded. In the NAP formulation process, a bottom up approach was adopted. Workshops were organized at state levels, followed by a series of workshops at national level. Draft proposals from states and national workshops were synthesized to come up with a national action plan document. However, NAP is little known outside limited circles and lacks cross-sectoral linkages with other initiatives. In fact the issue of desertification control and protection of natural resources is frequently referred to in the NCS (1992-2002) and in addresses by the president and

concerned ministers. Despite these directives, the policies formulated and activities implemented are sectorally biased. The main weaknesses of these policies is the lack of coherence as it was the result of work of different sectoral teams without efforts being made to establish horizontal and vertical integration. The net result is the lack of comprehensive approach to combat desertification and poverty in affected areas.

b) Compatibility and complementarity of the NAP strategies with other plans

NAP elements provide guidance to other plans to incorporate and emphasize desertification control as a means to reduce poverty and ensure social development. There are major areas where NAP directives and objectives are included in other plans. In most sectoral strategies and plans there are emphases on the protection of natural resources but not dealt with in a comprehensive plan to achieve the objectives of desertification control.

NAP also provides framework for involvement of private sector, donors and local communities in efforts of desertification control. It provides clear directions to achieve such involvement. There are a number of related initiatives to NAP which include; population policy; agricultural strategy, forestry outlook and water policy. All these initiatives contain elements related to desertification control and NAP. However, they lack direct linkages to NAP and proper integration. Their work plans are implemented in a fragmented manner. Moreover, in the process of formulating most of these plans little public involvement and consultation was carried out. Unlike the NBSAP and the NAP which were based on wide consultation and participatory approach. The NBSAP had been developed and approved by the Council of Ministers in August 2000.

c) Major institutional constraints to synergies

A National Drought and Desertification Control Unit (NDDCU) was established as a focal point with the mandate to implement the United Nations Convention to combat Desertification (UNCCD). With such mandate, the NDDCU is supposed to spearhead the process of combating desertification and the implementation of UNCCD. This requires coordination amongst different government institutions and sectoral agencies. The NDDCU initiated the process leading to the formulation of NAP. However, its coordination capacities are limited. It is also constrained by its location within the Land use Department that reflects the lack of awareness of its mandate as a National Coordination Unit and focal point for (UNCCD) and other regional bodies. The NDDCU with its present capacities cannot fulfill its obligations. There is need to upgrade its position as a national unit and build its capacities institutionally and financially. Without such changes in its structure, its coordination and integrating role will be limited.

d) Efforts to involve the private sector

The NAP suggested implementation of policies to encourage private sector involvement in three forms:

- Levy taxes on licenses of agricultural schemes, sale of animals and markets of crops to generate funds to combat desertification.

- Encourage private sector to establish projects related to natural resources protection. This could be achieved through tax exemption.
- Policies to oblige the existing national social funds to contribute from their resources to efforts of desertification control.
- Capitalize on the Photovoltaic Project experience to entice the private sector.

NAP also recommended provision of support to research institutions to be more involved in issues of arid lands management and adaptive research in marginal areas.

e) Awareness raising

In order to close the gap between existing policies and desertification control policies, NAP emphasized awareness raising at all levels of decision-making. This could be achieved through extension, environmental education, media, workshops and seminars.

f) New initiatives undertaken

The country is in the process of formulating a 25 – year strategy and a National Sustainable Development Strategy. Both strategies should benefit from the lessons learned during the implementation of the NCS (1992 – 2002). The NSDS should be built upon the various sectoral economic, social and environmental policies and plans operating in the country. It is to be developed through the widest possible participation. The NSDS should respond to the need to harmonize the various sectoral initiatives through a more holistic approach that generates synergies. The Interim Poverty Reduction Strategy, now under formulation, also should take into consideration issues outlined in NAP.

g) Linkages achieved with sub-regional and regional action programmes (SRAPs and RAPs)

Despite the efforts made by IGAD for sub regional programmes, little has been achieved. Projects for regional cooperation were formulated but lacked finance for implementation. It is hoped that the Nile Basin Initiative will provide finance for the implementation of Transboundary Watershed management project involving Sudan and Ethiopia. This initiative does conform to the objectives of NAP.

h) Government's Agreement

As indicated above, all processes of consultation and involvement of stakeholders for preparation of NAP were completed. A draft was further discussed and elaborated in a national workshop. The NAP in its final form is yet to be endorsed by the government. On-going projects, suggested by the NAP are being implemented however, so far, no specific budget is allocated for the implementation of NAP programmes except for running costs to enable the continuation of NDDCU.

i) The National Coordination Body (NCB)

The National Drought and Desertification Control Unit (NDDCU) has been established within the Ministry of Agriculture as a national coordinating body (NCB).

The NCB is attached to the Land Use Department giving it a lower Status in the hierarchy of the Ministry of Agriculture. Under such circumstances its influence in policy and legislation and decision-making is limited. Its present status and links within the Ministry of Agriculture represent the main obstacle to its function as a NCB. It has a full – time secretariat with very limited staff and lacks financial resources. Bearing in mind its present status and limited institutional and financial capacities, it cannot effectively promote synergistic developments for sustainable land management.

The NDDCU needs major restructuring to upgrade its status as NCB. There is a need to build its capacities in terms of appointment of more qualified staff, provision of equipment, availability of financial resources, logistics and to become autonomous in terms of resources and decision – making.

j) Cross – Cutting and Multidisciplinary characters

The NDDCU being part of the Ministry of Agriculture is treated as a department in the ministry ignoring its role as NCB. Hence, it lacks communication with other sectors despite the fact that there are more than 20 institutions concerned directly or indirectly with issues of desertification control. A coordinating Council formed from different sectoral departments was established and chaired by the Under Secretary, Ministry of Agriculture. This coordinating council was supposed to ensure the participation of the various stakeholders and to supervise the implementation of UNCCD. However, at present this coordinating council is not functioning and the NDDCU is completely merged in the Ministry of Agriculture.

In spite of these obstacles, the NCB, in the process of fulfilling its mandate, created links and communication channels with relevant institutions to conduct studies or to be involved in the NAP process based on personal gesture.

As the NCB lacks capacities in aspects of coordination and information system, there is a strong need to support the unit through:

- Provision of Equipment,
- Creation of data base, and
- Logistical support and networking.

k) The legal regulatory framework

Prior to 1970, environmental legislation was primarily concerned with conservation of natural resources and generally neglecting impacts of activities on human beings. After 1992, legislations have become more concerned with management, protection and use of natural resources in a sustainable manner. Laws and regulations also began to incorporate international standards and commitments. These efforts materialized in 2000 in the adoption of Sudan’s Environment Act. The Act represents a great achievement towards harmonizing the different sectoral environmental laws. The Environmental Act is supported by statements in Sudan’s 1998 constitution. Thus the environmental safeguards became constitutional rights.

Environmental law enforcement is rather poor because of the limited capacities of the concerned institutions. Lack of staff and political will are the most prominent obstacles to proper law enforcement.

In order to improve law enforcement, the capacities of the Higher Council for Environment and natural resources (HCENR) must be upgraded. In this aspect, an Environmental Monitoring and compliance Department (EMC) must be established. This department must include trained staff to perform inspection, monitoring and audits.

The issues of land tenure are complex in the Sudan. Land Act of 1970 deems all unregistered land, which is about 80% of Sudan's area as government land with usufruct rights by the local communities. However, local communities consider the lands they occupy as owned by them and hence practice customary rights. Because of the complexity of land tenure issues not much has been done, except some efforts to regulate the movements of nomadic tribes in specified routes and to ease conflicts between nomads and farmers.

The measures taken to strengthen the capacity of local population in combating desertification include:

- Strengthening Native Administration.
- Support to local Community-Based Organizations (CBOs).
- Establishing greenbelts around villages and construct fire lines and establish nurseries in collaboration with local communities.
- Raising awareness of the local population and traditional leaders.

Law enforcement through NAP is based on existing laws and regulations. Most of the sectoral legislations e.g. Forestry, agriculture, water resources etc. contain elements of enforcement, while the NCB has to monitor the implementation of these laws and report to the coordination council. At the grassroots level, the traditional mechanisms are still functioning in a way relevant to NAP objectives.

B. Effectiveness of the participatory processes in the formulation and implementation of the NAP and its related activities

Several activities had been implemented during the last two years. Participatory processes in implementation of NAP related activities were made in different states and involving several stakeholders.

Methods of participation of various actors in occasional consultations include meetings, use of national media (newspapers, radio and television) mainly to raise awareness, and to disseminate information. Limited extension work was conducted by Forests National Corporation (FNC) and the Ministry of Agriculture and Forestry (MoAFF). National NGOs conducted several activities which involved consultations with CBOs and meant to include them in the planning process.

Khartoum State Ministry of Agriculture, Animal Wealth and Irrigation and other state ministries have appreciable efforts on combating desertification through afforestation and water harvesting programs. The Ministry of Irrigation has implemented projects such as Improvement of Water Resources and Agroforestry and Rangelands. The

Ministry is also establishing the Hamadab Dam which will provide more water to semi-arid areas and electricity which will alleviate the pressure from biomass consumption. The Ministry is also implementing a regional early warning project to predict the seasonal floods.

The FNC could be credited as the most active government institution leading in conducting awareness campaigns, in the form of workshops and public meetings. The FNC celebrated the Tree Day, and the 100th anniversary for establishing of the FNC, which was attended by the members of the Council of Ministers. The FNC in 2002 conducted 290 workshops and awareness meetings, 364 Radio and TV programs, 6 exhibitions and contributed 13 articles to daily newspapers. In 2003 the FNC conducted 235 workshops and public meetings and made 945 extension visits and produced 436 Radio and TV programs. The FNC involved CBOs, national and international NGOs, and involved women and youth groups in its activities. The FNC activities could be described as top-down oriented; beside they incorporated considerable consultations and participation from CBOs, and NGOs.

The Sudanese Environment Conservation Society (SECS) could be classified as a leading NGO conducting participatory process in support of implementation of the NAP related activities. SECS first strategy 1992 – 2002 specified the desertification problem as the major environmental problem in the Sudan. SECS housed the national NGOs Committee for Combating Desertification (NCCD) and acted as focal point for a network of 100 branches located in more than 13 states. Also SECS had been active in conducting workshops and meetings at Khartoum and in the states where direct consultation and discussion on issues of NAP related activities were discussed. Also SECS in its head quarter offices housed the NGOs network for poverty Alleviation. It should be added that the NCCD NGOs network was not as active during the period 2002-2004 when compared to 2000-2002, and that efforts to activate this network are being made.

B-1. The current trend of the participatory processes in relation to the NAP framework

The progress in the participatory process, notably with respect to areas of improving the economic environment, to conserve natural resources and promote their sustainable use, to rehabilitate degraded land, to enhance knowledge on desertification and its control, and to monitor and assess desertification and drought is showing the general trend as follows:

- Sudan is involved in a participatory process towards adoption of Interim Poverty Reduction Strategy Plan (IPRSP) during the period 2002-2003. Capacity limitations of both government and civil society organizations are evident. Inadequate institutional and human capacity is evident as reflected in poor data base, insufficient poverty diagnostic and limited capacities in costing, budgeting and Public Finance Management. Most evident needs were developing genuine partnership involving civil society organizations CSOs, government and private sector institutions. Specific recommendations related to policy review, planning and impact assessment in relation to poverty reduction, were highlighted.

- The Sudanese Civil Society Network for Alleviation of poverty (SCSNAP) which was established by a group of NGOs in collaboration with the Netherlands' Oxfam participated in the consultation of IPRSP. The network conducted several meetings and workshops with emphasis on identifying CBOs best practices in mitigating the negative impact of poverty and work with other stakeholders towards introducing or recommending pro-poor macro-policies.
- The experiences of the UNDP projects of Area Development Schemes (ADS) sponsored by UNDP USD 39,000,000 targeting 1,200,000 persons mainly in drought hit areas with objectives to minimize displacement, sensitize targeted communities about alternatives other than the traditional way for making a living, to include the communities in the process of decision making (the bottom-up approach) and the participatory approach. The ADS experiences provided useful models and practices to be pursued. Also elements of success and failure were well studied. The elected Village Development Committee (VDCs) are among the useful practices followed by the ADS participatory approach in conceiving and implementing interventions in areas such as agriculture under drought and scarcity of rain, goat and sheep restocking, flour mills, curative health (clinics both human and veterinary, preventive health (sanitation), hafirs (ground-excavated water reservoirs), hand pumps, hand-dug-wells, boreholes and management of water yards, range land rehabilitation, and encouragement of women participation.
- The ADS was terminated after phase III and projects were handed over to the communities. Measured against goals, ADS has made some success in areas of human development, productivity and least in environment conservation. Also ADS opened the eyes of the targeted communities to new perspectives, such as participatory approach, bottom-up approach, revolving fund...etc. Communities were sensitized to new alternatives and new ways of life. Sustainability is still uncertain. Many projects which are directly touching the life of individuals in the community are still striving to survive. However projects of communal nature are displaying symptoms of deterioration.
- The Dinder National Park Development Project (DNPP), a project that is funded by the Global Environment Facility (GEF) through the United Nations Development Programme (UNDP) is being implemented by the government's Higher Council for Environment and Natural Resources (HCENR) and The Wildlife Conservation General Administration (WCGA).Benefiting from the ADS' experiences the project is establishing about 30 VDCs among the communities surrounding the Dinder Park. The DNPP main objectives are conservation of biodiversity of the park and integration of the surrounding communities in the conservation and sustainable use of biodiversity in the park through the application of concepts of Biosphere Reserves management. The DNPP has been working with WCGA and surrounding communities in transformation of natural resources based conflicts. During the first phase of the project 2001-2003 achievements included raised environmental awareness among the communities, establishment of 30 VDCs, working with the communities in promotion of successful alternative livelihood models, and development of a management plan for the park to be implemented with the communities. The DNPP started to address problems of landuse in the surrounding three states.

UNDP approved a second phase for DNPP to consolidate the positive aspects of the first phase to emphasize land-use issues, working with the pastoralists and strengthening the community participatory program.

- Participatory efforts in afforestation activities were led by FNC. In 2002 FNC organized seed broadcasting in 50485 feddans, distributed 2,080,433 tree seedlings, established 245 community forests covering 128,490 feddans and led tree planting campaigns in 2604 public buildings and areas. The above participatory program included several CBOs and NGOs and was implemented in more than 13 states. The FNC with sponsorship from United Nations High Commissioner for Refugees (UNHCR) was able to rehabilitate 4460 feddans of forest which were destroyed by refugees in Kassala and Gedarif State. The level of participation of refugees in the rehabilitation was not discussed in the forestry report
- During 2003 the FNC has put forth participatory efforts with CBOs to establish 105 community forests in 10474 feddans during 2003. Also ACCORD in the Red Sea State distributed 1500 seedlings and rehabilitated 50 feddans of rangeland. The SOS Sahel International (UK) established 14 community forests associations in Northern Kordofan. The associations registered in 2002 were responsible for tree plantations in 7018 feddans in privately owned land and in 85,000 feddans in communally managed land. It was reported by S.O.S that community forestry had proved to be an effective strategy in strengthening the livelihood resources base of 32,000 persons in N. Kordofan.
- The participation of CBOs, NGOs and their cooperation with FNC in Darfur, Blue Nile, Kassala, River Nile, Northern and Khartoum states had been instrumental in planting 1,500,000 seedlings and 47.2 tons of seeds and in establishing shelter belts. SECS through its branches in Atbara, Al Akad, Kassala, Remaitab, Halfayia, el Fashir and Rahad in Nile, Kassala, Gezira, Khartoum and Northern Darfur States had been involved in tree plantations.

It should be stated that in most of the above of afforestation activities no follow up or monitoring of progress had been reported.

Improvement of Water Resources, Agroforestry and Range Land

- Improvement of irrigation from the White Nile in Gomoaia Agricultural Project through participatory efforts facilitated by government (MoAFF) (2003) which made it possible to introduce electrical pumps to replace old diesel pumps and led to extension of Irrigated land that provided livelihood for 65 families.
- Khor Arbaat Rehabilitation Program (KARP) is a participatory programs funded by S.O.S Sahel International (UK) supported by (MoAFF) targeting better water management. KARP followed the ADS model in using revolving fund emphasizing participatory approach benefiting 500 households who cultivated 3000 feddans with different crops.
- Tokar model is an Oxfam (G.B) community participatory project supported by WFP through providing food for work and facilitating community work to rehabilitate 9000 feddans through clearance from mesquite tree *Prosopis spp.* (an alien invasive species) thus benefiting 1800 farming families.

- Cooperative farming is also practiced in the Red Sea State in three villages sponsored by ACCORD aided by the Range and Pasture Administration (RPA).
- The RPA also led participatory efforts to collect range plants seeds had succeeded in collecting 5600 sacks in Kassala State and 1200 sacks in North Kordofan State.
- Improving water quantity and quality is a priority area which is a good entry point for donor organization to provide community support. Oxfam (G.B) supported community efforts to rehabilitate 10 hand-dug wells in the Red Sea State. SECS with support from the Japanese Embassy with community participation in Kebkabia in North Darfur and Bara in Northern Kordofan established two water yards. Also through help from the British Embassy they established water yards in Kutum in North Darfur. The DNPP with VDCs in Gedarif and Sennar States drilled 13 wells equipped with hand-pumps. S.O.S and WFP used food for work to facilitate community support in developing 11 Hafirs in Northern Kordofan. Also Oxfam (GB) supported by European Union facilitated several water resources development programs through participatory efforts.

Alternative Energy Projects

The petroleum discovery in Sudan and the establishment of Petroleum Refineries and production of butane gas made it possible for the government to reduce prices of butane gas. Butane gas as a substitute to biomass use as a source of energy has increased significantly. Introduction of butane gas as an alternative source of domestic energy requires the acceptance of the community, and also requires the provision of stoves and cylinders and a sustainable source for refilling the cylinders at affordable prices. The FNC established what is called (Ghabat Gas) addressing the above mentioned issues and targeting 50% reduction of biomass use in 3 to 5 years. In 2002, FNC succeeded in distributing a total of 86,697 stoves and gas cylinders in 16 states. The largest number of distributed cylinders was in Khartoum, Nile and Gedarif states with the rest of states receiving from 6,000 to 1,000 cylinders. The gas distribution was undertaken in cooperation with government institutions, NGOs and private sector. However the FNC Annual Report (2003) did not report on increased number of distributed cylinder but the report included information of cases of failure to repay cost of gas stoves and cylinders, which were taken to courts. The FNC conducted experiments for using petroleum alternatives in brick kilns and traditional bakeries. Such experiments are still on-going.

SECS in cooperation with its branch in El Rahad, Northern Kordofan State, and with support from African Development Bank distributed 500 stoves and cylinders in 11 villages. DNPP and VDCs supported by UNDP and MoE in Sennar, Blue Nile and Gedarif States introduced butane gas for domestic energy and Solar Energy in Schools, medical centers and social clubs.

The photovoltaic cells project which was sponsored by GEF and MoE in the first phase and in its second phase on UNDP and MoE cooperation is targeting promotion of solar energy. The project was executed by the private sector, government departments, NGOs and community groups. PhaseII of the project is including government support for introduction of Solar Energy in 1000 villages. Community participation and contribution is a prerequisite for governmental support.

Food Security

Food security in Darfur has been a matter of great concern to NGOs, donors and community, Save the Children (SC-UK) is the focal point for food security monitoring in Darfur. SC-UK in collaboration with Oxfam, WFP and the relevant government departments is conducting regular early warning surveys. The program which is supported by the European Union is including: Household Socio-economic baseline information, capacity building and household economic analysis (HEA). The work is conducted as team work in collaboration and participation with government and community group. SC (UK) produces regular surveys in collaboration with Food and Water Emergency Committee of North Darfur. These surveys produced estimates of food gaps (for example for 2003 estimated as 10389 MT in Northern Darfur).

Development of several governmental strategies and plans such as the IPRSP (Interim Poverty Reduction Strategy Plan) had direct and indirect relationship with NAP for Combating desertification and for real progress in implementation of the action plan programs. Therefore, in order for this linkage to be valid the issues below should be addressed:

- More efforts should be put to speed up the official endorsement of NAP to establish the NCB, to strengthen the NFP and to establish a national fund for combating desertification.
- Better coordination and adequate diagnosis of past experience. Encouragement of a more participatory approach and evaluation of activities undertaken.
- Emphasis on bottom-up approach in addressing the planning and implementation of activities.

The unfortunate development of the recent conflicts in Darfur requires more attention to issues of land use and community participation in Natural Resources Preservation and Management. Nevertheless, the following opportunities could be realized:

- The progress achieved in resolving the war problem in the South should make it possible for the Government to address the NAP implementation as a national priority and to allocate adequate resources to the activities of NAP.
- The Conflict Transformation Program in the Transitional Zone is currently being implemented by the UNDP and is focusing on pastoralists.
- It is encouraging to note that more attention is being directed towards resolving natural resources based conflicts with emphasis on pastoralists' needs and rights. This approach is accepted both by the government and donors as a strategy towards development, especially, in Kordofan and Darfur states as indicated in project document to be implemented by IFAD:
- To consolidate past and on going development in the three states of Kordofan five cross-cutting issues need to be highlighted:
 - Equitable and transparent marketing arrangements to promote fair trade of livestock,
 - Strengthening of agricultural and pastoral services, producer's organization and other economic actors,
 - Strengthening state and inner-state planning and operation framework with especial consideration to Natural Resources Management and trade of primary production products, and

- Increasing of state revenues for maintaining and developing agriculture production and trade services.

This experience could also be replicated in Darfur States.

The Community Forest Project of Debba, in Northern Province, was sponsored by S.O.S and implemented through participatory community efforts. The project design depended on planting mesquite *Prosopis spp.* as shelterbelts to hold and stabilize sand dunes and hence save agricultural land. The project was awarded UNEP environmental prize. However, S.O.S in evaluation of the project indicated that considering the magnitude of natural forces at work, there is no way that the project activities however effective in short term, can stop the desert in the long run, or stop the desert or reverse the trend of desertification in the long run. The evaluation report also added that: "the above conclusion in no way should diminish the justification for the present project. The shelterbelts are effective, do hold back sand and will protect land and settlement for some time to come".

B-2. Women and private sector are on board

B-2.1. Women's Role

Women are participating in the activities of several NGOs and have considerable contributions to activities related to the NAP process. The UNDP ADS Committees incorporated women as members in most of their committee and also included several development activities for women in their programs. Women's participation is included as part of the National Strategies and most donors are having women participation as a crucial part of their projects' planning and implementation.

A women's cooperative association was established in Northern Kordofan in (2002) by S.O.S project. Also women were included in other committees established as part of S.O.S activities. Social and economic contribution of women enhanced. Approximately half of the members of 14 forestry associations were women, who were widely appreciated in and outside their communities for their "voice". In S.O.S project (2003) of Khor Arbat Rehabilitation Programme (KARP) 50% of the 500 farmers who benefited from the project were women. Four women's development centers have been established to provide training on environmental health, nutrition, food processing and literacy. The Introduction of Jubraka (home gardens) and poultry farms has increased women's income constituting an important contribution to the quality of family life.

The S.O.S Village Extension Service (VES) at the River Nile State had been focusing on villages' shelterbelts and Rural Extension for promotion of seedlings production and tree planting. The VES was followed by a three years program with focus on women as major potential participants in desertification control. S.O.S projects were handed to the FNC. S.O.S reported that the FNC did not add any value to what had been done.

- The DNPP is involving women members in all VDCs in Sennar, Gedarif and Blue Nile States.
- SECS established four community development centers in Kutum in Northern Darfur, El Rahad in Northern Kordofan, Kosti in the White Nile, and Halfaya in Khartoum State. All centers did emphasize women's capacity building and conducted training courses with diverse topics.

- Several National NGOs are conducting women programs. The Environmentalists Society conducted training for women and youth refugees on environmental peace issue. The Environmentalists also conducted an awareness day on desertification for children from six primary schools in Khartoum.
- The Haudag (a pastoralists women's society) is an NGO targeting training, lobbying and advocacy for pastoralist women. The Haudag society participated in a few activities lobbying for pastoralist women's rights.
- Babiker Badri Scientific Association for Women Studies is an NGO dedicated to enhancing women's status towards equality, empowerment and development. The society in 2002-2003 contributed studies about the role of civil society to achieving national food security and conducted a study about the impact of policies upon working women which was presented to a national workshop.
- The Sudanese Development Association (SDA) is another NGO with goals to achieve sustainable development working with poor communities building up their capacities and involving them in development. SDA in 2002-2003 conducted a program with displaced women and established a cooperation Group for women producing and selling food in Khartoum state. Also SDA implemented projects for water provision for rural communities in Kordofan, Nile and Gedarif states where special component for woman training was included.
- In general women participation is increasing in NGOs and government institutions. It is worth mentioning that the current director for the NFP is a lady. Also several women's networks are being established and operating such as the women's network for combating desertification. However, all of the above listed activities even though are indicating a positive trend, are not linked to specific activities in NAP process. National coordination, support and monitoring are lacking.

B-2.2. The Private Sector

The private sector is not directly involved in the NAP related activities and programs, however, indirect involvement of the private sector could be briefly stated as follows:

- The involvement of the private sector in land-use and Natural Resources-based conflicts resolution.
- The involvement of the private sector in Alternative Energy provision of materials: such as trade in gas stoves and cylinders, solar energy kits ...etc.
- The possible conflict or cooperation between revolving fund beneficiaries and private sector such as traders.

Contribution of the private sector in developing technologies

- Planting *Acacia senegal* in 5% of the areas of rain-fed agricultural schemes could lead to improving soil fertility and providing an additional source of income for the farmer as well as providing shelterbelt for farm and increase grazing land resources. Such practice has been exercised in Gedarif state through a promotional program initiated by a private company. However the company ran into financial difficulties due to inability to secure needed loans, failure in price of gum Arabic and government policies which had negative impact on the agricultural sector.
- A new practice for a technical package which could result in high productivity of sorghum through zero tillage, use of herbicide and fertilizer has proved

success on trial plots in the Blue Nile State. However problems of lack of needed finance will hinder wide implementation.

- Likewise is the expansion of use of butane-gas, solar energy and biogas which all require financial inputs from the government and donors.
- Livestock production is an open area for many interventions. The efforts done by the state of Gedarif in establishment of water points proved that pastoralists are ready to pay if services are provided. With opening of new regional and international markets for Sudanese livestock and meat more could be done in this area such as ranching, grazing resources improvement and establishment of grazing systems and marketing system. However there is urgent need to strengthen the pastoralist union and to involve the Union in the rehabilitation and management of the resources.
- Minor improvements in areas of aquaculture, recreation and ecotourism. The significance of these areas could be boosted after the peace agreement.

B-3. Capacities needed to maintain a mechanism for active involvement of stakeholders (at local and national levels)

- Although a wide participatory process has been started to develop the NAP, the process is being interrupted due to lack of political support. NFP is not strengthened and no national fund is being established. The NCB is not officially established or identified.
- Diverse groups of national and local stakeholders had been identified with clear capacity needs which should be addressed as follow:-
 - Planning policy and financing functions across government agencies and Inter-agency linkages.
 - Assessment of civil service needs: Salary structure and incentives. Personnel levels and skills gaps.
 - Review of performance in natural resources management agencies.
 - Development of state governmental agencies.
 - Community Based Organizations to address issues of legal framework and capacities.
 - Private sector tax and finance policies and regulations.
 - NGOs legal framework and strengthening.

B-4. Criteria used for selecting actors in national priority identification process

A diverse group of stakeholders was examined and representatives were selected at state and national levels. However, as there is no NCB selected yet the following criteria should be considered:

- The NCB should include representations from government, private sector and civil society.
- The representation from each group should be done in a participatory and transparent way. IT should be a bottom-up process.
- Geographical representation and gender balance should be considered.

B-5. Scientific community representation and role in monitoring

- GIS had been used to compile data and information in the early 1990s. The process requires continuous updating and improvement.
- More efforts are needed to include the national scientific community. A UNESCO Chair on desertification established in 2003. The UNESCO Chair with the Desertification Institute are planning to establish Information and Research Network.
- Research Programs were conducted by IES Dryland Husbandry Project and by the National Council for Research (NCR) in Rawakeeb area west of Omdurman. However, results are not linked to specific monitoring programs.

B-6. Utilization of a traditional knowledge system

- Traditional knowledge has not been documented and studied in the Sudan. The first National Report included recommendation to establish a national mechanism for the study and analysis of traditional knowledge to be integrated in NAP related research and activities.
- No serious efforts had been done to implement the above recommendation.
- The Medicinal and Aromatic Plants Research Institute (MAPRI) of the National Council for Research is conducting surveys on medicinal plants and ethnobotany.
- Also SC (U.K) in monitoring of food security in Darfur is conducting regular survey of natural emergency foods.
- Traditional ways and approaches in conflicts resolutions need to be documented.

B-7. Established linkages with educational centers to promote environmental education

- A programme named "Hope in the Desert" by the Sudanese Red Crescent (SRC), the Institute of Environmental Studies (IES) and Bakht El Roda University had developed certain models to encourage participatory action from the primary school, children.
- SECS introduced a programme entitled, "Rehabilitation of the environment of the primary schools" which was sponsored by Haggar Foundation. The program emphasized training teachers on environmental issues, provision of clean water and establishing plant nurseries and latrines. The model was initiated in Khartoum State and was also implemented in Darfur and Nile states.
- Inclusion of the desertification in curricula was also made in Primary and secondary schools.

B-8. Mechanisms adopted to ensure that actors are involved in information provision

- Although several actors are informally lined to information exchange in relation to NAP-related activities, there is no formal information mechanism.
- In discussion of how effective are the participatory processes in formulation and implementation of NAP brief presentation of information exchange were presented.

B-9. Participatory awareness campaigns themes

(i) Growing threat to ecosystems and sustainable livelihood under a scenario of extreme climatic events

Several workshops, Seminars, radio and TV meetings were held by the Higher Council for Environment & Natural Resources, UNDP-GEF Climate Change Enabling Activity Project. The Sudan first National Communication under the United Nation framework Convention on Climate Change Vol. 1 & II were published and widely disseminated. The National Communication was prepared in participatory approach with contributions from more those 60 authors representing all related sectors and specialization. The National Communication was subjected to several workshops and meeting before printing its last version.

(ii) Advocacy for participatory rural development as key element in poverty eradication

The rural poverty had been frequently addressed and related to unjust land-use practices favoring horizontal expansion in mechanized rain-fed agriculture practices at the expense of traditional producers (small farmers and pastoralists) and natural resources. As such the issue is often discussed in awareness campaigns of environmental and development NGOs. Indeed almost all strategic planning notes of the government are addressing the issue.

However, more advocacies for participatory rural development in poverty eradication is much more needed. Poverty in Sudan is multi dimensional in nature. The limited participation in development of IPRSP through exclusion of the poor and important segments of the SC.S.O, curtailed the country's ownership of the process. As a consequence of this, assessment of poverty and analysis of its causes and future vision and related strategies, policies and programs, suffered from being limited to few inputs of experts and officials.

iii. Recognition of the widespread downstream geopolitical consequences of phenomena such as forced migration and conflicts

Sudan had a wide experience in relation to forced migration due to conflict. Natural resources based conflicts are causing the tragedies in Darfur.

The civil war in Southern Sudan which extended to Southern Kordofan, Southern Blue Nile State and Eastern Sudan where people of these areas claim to be marginalized in both power and wealth. They generally blame the elites in the centre, who inherited the colonial state machinery after the independence in 1956. Although

political reasons (power sharing) are manifested as the main reasons, conflicts over resources (wealth sharing) remains one of the main root causes.

(iv) The prevention of land degradation

The prevention of land degradation is more cost-effective than suffering the severe consequences of desertification. Participatory awareness activities and programs as explained earlier, are stressing the need of popular efforts in conservation of forest and adoption of energy alternatives. More could be realized, resources are not available to support community forestry and alternative energy programs.

(v) Dissemination of lessons learned and best practices

The S.O.S shelterbelt model in the Northern Province (discussed in previous parts of this report) is often publicized as best practice exercise. Also SECS work with (Sebnas) village community in the Nile State was recognized as a best practice model by UNDP (UNSO).

There are limited efforts in identifying best practices and making such information available to interested communities.

B-10. Consultative process in support of the preparation and implementation of national action programs

- ◆ With the exception of UNDP (UNSO) and AOAD no international partners have contributed to NAP due to restriction on aid to Sudan. It is hoped that after signing the Peace Agreement International partners will be more involved in supporting NAP.
- ◆ It should be pointed out that several programs were carried out by UNDP and GEF in Sudan such as:
 - Biodiversity and Climate Change National Planning.
 - Dinder National Park Project.
 - Nile Basin Initiative.

It is worth mentioning that the NAP has not been officially endorsed and no national financing mechanism has been established. In addition, no significant international input has been contributed to NAP-related activities.

Furthermore, the NCB is not well established yet and needed support for NFP is not released to allow more active communication with GEF and other potential partners.

C. Measures taken or planned within the framework of National Action Programme

C-1. Past experience

Attention to land degradation in Sudan was first drawn in the thirties of last century when the Soil Conservation Committee was formed and made its recommendations in 1944. The committee alerted that the cause of land degradation was the misuse of land resources. Another contribution was the UN's programme, Desert Encroachment

Control and Rehabilitation Programme (DECARP) in 1977-1978. These were followed by the UNSO-UNDP similar efforts in (1997-1999).

Sudan contributed to the effort to combat desertification; it was one of the first countries to sign UNCCD and formed the National Unit for Coordination of programmes to mitigate the effects of drought and to combat desertification in the Ministry of Agriculture and Forestry.

With the Cooperation of the Arab Organization for Agricultural Development (AOAD) in 2002 a national Action Plan for combating desertification in the Sudan has been formulated. The study overviewed the then prevailing situation and made an analysis of desertification in the country. The study also identified the human induced and natural factors causing the phenomenon and consequent results manifested in land degradation, declined productivity in major agricultural systems and poverty. These factors include; excessive use of resources particularly the uncontrolled and irrational expansion of agriculture at the expense of natural resources, occurrence of recurrent drought, the negative impacts of poverty and absence of appropriate policies to ensure sustainable management of natural resources. Displacement of rural population in different parts of the country because of insecurity and conflicts to urban centers has their negative impact on the resources. The problem is more aggravated by the influx of refugees, sometimes with their livestock, into the country as a result of conflicts and instability in neighboring countries.

C-2. NAP recommended actions for combating desertification and mitigating its effects

These include:

- 1- Policies: These should form an integral part of national policies which must be in line with international approaches and plans to encourage interaction and complementarity for enhancing the exchange of information and experiences.
- 2- Attraction of finance from governments, private sector and foreign donors.
- 3- Coordination of the efforts of the large number of institutions, organizations and NGOs involved.
- 4- Awareness raising and promotion of popular participation through awareness campaigns, conferences field discussions and distribution of posters and leaflets.
- 5- Strengthening the role of local communities in planning, implementation, monitoring and evaluation of programmes and projects.
- 6- Formulation of a national strategy to assist drought affected communities, protect resources and to avoid or minimize the adverse effects of droughts.

C-3. Programmes and projects proposed within the framework of NAP

UNCCD pointed out that each country should take action to strengthen its capacities related to drought and desertification. The programmes and projects were recommended according to the proposals submitted by the affected states, recommendation of relevant studies and workshops and the directives of the quarter

century national strategy (2002-2027). These are broad lines that can later be expanded and detailed in the form of draft documents suitable for funding.

(AOAD) gave a detailed evaluation of past experience and suggested an organizational and legal mechanism for integrating and coordinating efforts. The intervention has not yet been approved by the official authority and as such has not attained the official commitment of the parties concerned. For the purpose of this report it will not be possible to compare the achievements by different bodies to a national action plan agreed upon.

C-4. Activities complying with priority fields set out in the convention

1) Activities complying with priority fields

The report period witnessed a number of joint activities and studies which contribute to the process of combating desertification. Most prominent of these activities are:

- The establishment of a land cover data base through the regional project (Africover) which included nine participating countries beside Sudan. The project aimed at capacity building of participant countries in the use of remotely sensed data and geographic information system (GIS) in mapping the land cover and establishing digital land cover data base. The data base is flexible enough to accept more information layers and periodic updating and improvement through the work of all stakeholders. The data base is managed by FNC and land classification maps are available up to the year 2004 for researchers.

In Sudan a National Working Group (NWG) including a number of different institutions representatives supervised and directed the work of the project. The data base is now managed by Technical Committee formed by the (NWG).

Seven technical staff selected from six government institutions (Forests National Corporation, Public Administration of Natural Resources, Remote Sensing Authority, Range and Pastures Administration, the Soil Research Centre of the Agricultural Research Corporation and the National Survey Corporation) were trained in photo interpretation and land cover classification at the project's head office in Nairobi, Kenya. The participants did the satellite images interpretation and field truthing under the supervision of the projects experts.

The data base can have applications in various fields connected with desertification, poverty, food security etc. This is the type of necessary information which is needed in desertification combating activities. Other joint works include:

- The Committee formed by the civil defence to study the causes of conflicts over natural resources which came out with recommended programmes for the development of range lands and other natural resources.

- During the report period the president of the republic constituted a multidisciplinary committee under the chairmanship of the under secretary of the Ministry of Environment and Physical Planning to look into; natural resources deterioration, desertification and droughts, floods, tribal conflicts, over natural resources exploitation, current legislations of environment and natural resources, energy use and

land use map and draft relevant projects. After more than ten meetings the work of the committee stopped because funds were not available to finance its programmes.

2) Activities related to desertification and NAP undertaken by different government units and other organizations

2.1.) Range management year 2002-2003

- Preparation of a national project in collaboration with Civil Defense Project for range seeds collection, range land enrichment and rehabilitation of natural resources. The project aims at improving 45 million feddans (10.5 million hectares) of range land.
- Formulation of a national net work of fire lines of 48.240 kms. In the different states. Finance was requested from the Ministry of Finance which approved it but did not avail the funds.
- Participation in the biodiversity project by preparation of a project of rehabilitation and management of range land through the establishment of protected areas and fodder farms.
- The States of Kassala and North Kordofan collected 1200 sacks of seeds respectively
- Preparation of a project for the protection of endangered range species. The project has been submitted to FAO seeking financing.
- Preparation of a project of integrated development of range resources in Maidoub area in North Darfur. The project has been submitted to FAO.
- A national project of rehabilitation of range land has been submitted to the Netherlands government for financing.
- The project of range resources development and management strategy in Blue Nile State has been submitted to the Arab Organization for Agricultural Development (AOAD) for financing.
- The IFAD project for Rural Development in North and South Kordofan is undertaking a comprehensive study which started in 2002 to develop a Sustainable Range Management Strategy. The study included range land, forestry, roads infrastructure, land use, agriculture, water resources, meteorology and socioeconomic study. The results and the proposed strategy is expected to be finalized shortly.

2.2) Forestry:

The Forests National Corporation (FNC) being a parastatal body has carried out numerous activities which fall within the frame work of NAP through self finance, joint work with UNHCR and FAO support. These activities include:

(i) Policies:

The current forest policy which has been adopted in 1986 and is undergoing review since 1997 due to the many social, economic, political and environmental change which have taken place A technical cooperation programme (TCP) supported by FAO has started in May 2003 to review and update the policies and organization of the forestry sector in Sudan. International and local experts have been contracted to finalize the job in October 2004. The process of reviewing the national forestry policy was highly participative involving all concerned stakeholders both at federal and state levels. 750 respondents were contacted in 18 states and at the federal institutions to

assess their needs, demands, concerns worries and perceived problems related to forestry sector.

(ii) Legislation

1- A new act of Forests and Other Renewable Natural Resources has been passed by the National Assembly in November 2002. The main features of this act are:

- It is in line with Sudan's National Constitution of 1998, which stressed the importance of environment protection and division of natural resources wealth between the states governments and the federal government.

- Protection of forests and other renewable natural resources from illicit felling, overgrazing, fires...etc.

The new act included range, water resources and land use.

- Encourage the use of non-biomass energy alternatives.

- The creation of a police force under the technical supervision of Sudan Police Authority to protect natural resources and help enforcing the law.

- The act placed the authority of de-reservation of gazette-reserved forests with the president.

- The act gave the general manager of forests and other renewable resources and the minister of justice the authority to settle disputes.

2- The Law of National Council for Planning and Division of Forests Resources was also passed in year 2002. The first vice president chairs the council with 15 members and the Minister of Agriculture and Forests as a rapporteur. The terms of reference of the council are:

- Naming and classification of reserved forests as for their ownership by the state government or the federal government

- Policymaking and giving guidance for identification of land suitable for planting, protection and reservation.

- Setting indicators and plans for the development and conservation of forests in line with other land uses.

- Planning and coordination with state governments to guarantee execution of national policies. The Council adopted the main principles that 1) Forests are a national wealth and that only revenue accruing from these resources can be divided between the state and federal governments. 2) Forests protecting rivers and watersheds are a national wealth.

3- Proposal of forest seeds law: The law is concerned with the organization of seed production, exchange, certification and registration.

4- Establishment of High Professional Council for gums regulations.

5- Establishment of High Professional Council for Natural Resources

6-Issue of a ministerial order prohibiting horizontal expansion of agriculture and setting rules for clearance of land already licensed for agricultural production.

7- Issue of Foreign Commerce Ministerial Order No. 47 and reconstitution of gum export Council.

8- The Gezira state Wali (governor) formed a high committee chaired by the state minister of Agriculture and the membership of Gezira scheme commissioner, the general manager of Forests National Corporation and others to formulate a project to plant trees in the form of shelter belts, wind breaks and wood lots in 5% of the scheme area.

(iii) Studies and workshops

- 1- Evaluation of the achievements under the National Comprehensive Strategic Plan (NCSP 1992-2002).
- 2- Gum Arabic workshop (January 2002) which discussed the production, processing and marketing of gum Arabic.
- 3- Preparation of Sudan report within the framework of Forestry Outlook Strategy for Africa.
- 4- Study on Forest Valuation and Investment in Sustainable Forest Management in Sudan.
- 5- Sudan National Forest Program (nfp):
 - i. To advance Sudan's nfp process FNC has established partnership with FAO/National Forest Program Facility. A two-day national workshop was organized within this context to realize, inform and engage concerned stakeholders and to help integrate the revised nfp into the national development vision.
 - ii. The FAO/National Forest Program Facility provided small grant in support of NGOs involved in Sudan's National Forest Program. The activities called for from non-state stakeholders are:
 - Preparation and conduction of awareness campaigns of forestry issues in general and nfp process in particular.
 - Formation of an nfp support advocacy groups. Five national NGOs were qualified for the "facility" support including SECS, Taiba Press and the Sudanese Social Forestry Society (SSFS).

(iv) Preparation of the Quarter Century Strategic Plan for the Natural Resources

The plan's objectives are:

- Food security.

- Increase export revenue by increasing the products quantitatively and qualitatively.
- Development of natural resources on a sustainable basis.
- Poverty alleviation.
- Compilation of a national land use map.
- Enforcement of natural resources laws.
- Protection of natural and human resources against; fire, misuse, illicit felling, overgrazing, poaching, chemical pollution, desertification, river banks erosion and cultivation of marginal land.
- Awareness raising and collaboration in protecting and rehabilitating the resources.
- Increased attention to cultural heritage and scientific values of biodiversity.
- Increased reserved forest areas to 90 million feddans (37.8 million hectares).
- Integration of agricultural sectors for sustained development.
- Increase sawn timber production from 1000 to 10000 tons.

(v) Forests reservation

In pursuit of achieving the forest policy objective of putting 20% of the total country area under forest reservation and working towards the realization of the NAP goals the areas shown in table (1) were reserved and registered as forests.

Table (1): Number and areas of forests reserved.

State	2002		2003	
	No. Forests	Area (feddan)	No. Forests	Area (feddan)
Northern	-	-	4	29411
White Nile	8	472000	9	472173
Blue Nile	22	10122	13	50635
North Kordofan	2	14891	-	-
Sennar	4	2733	1	350
Nile	-	-	2	141155
West Kordofan	22	125639	76	189056
Total	58	625425	105	882780

Source: FNC Annual Report
1 feddan = 0.42 hectares

(vi) Sustainable Forest Management

Management plans on a sustainable basis were prepared for the following forests and areas.

Table (2): Forests managed with a plan.

Sector	Number of forests	Area (Feddans)
Kordofan	7	24871
Central	51	43100
Darfur	2	2836
Northern	3	3868
Eastern	4	570
Total	67	75245

Source: FNC Annual Reports

1 feddan = 0.42 hectares

(vii) Forests seedlings Production and Afforestation

FNC produces seedlings in its nurseries for afforestation programmes in forest resources, distribution to individuals and popular organizations during the Arbor Day celebrations in the states and provisional capitals and selling to private farms for the establishment of shelter belts and wind breaks. In addition a number of private nurseries is now producing a variety of shade and ornamental trees seedlings though their size of production is not known.

Table (3): afforested areas inside forest reserves and agricultural schemes in 2002.

State	Afforestation		
	In forest resources (feddan)	In irrigated and rain fed agric. Schemes	Seedlings
Sennar	4756	4769	42500
Gezira	1745	20	295584
Blue Nile	510.5	2200	78000
White Nile	6016	1926	1021066
Kassala	1560	82	383000
Gedarif	8384	437	273879
Red Sea Northern	2005	10	12000
Northern	59	40	82196
River Nile	2116	180	128543
North Kordofan	1000	11431	1139000
South Kordofan	775	6044	187000
West Kordofan	1677	13477	401900
North Darfur	710	1755	35000
South Darfur	546	280	99800
West Darfur	235	140	375000
Total	50485	60000	5055368

Source: FNC Annual Reports (2002)

Table (4): planted areas in forest reserves, community and private forest during 2003.

State	In forest reserves (feddans)	Community Forests (feddans)
Red Sea	-	-
Gezira	1347	-
Khartoum	6	36.9
Northern	85	-
Gedarif	6671	1200
White Nile	3432	853.5
Blue Nile	1228	1000
South Kordofan	540	-
South Darfur	634	1800

Sennar	5244	421.6
North Kordofan	1518	601.5
North Darfur	310	2260
West Kordofan	1265	2134
West Darfur	94	55.5
Kassala	1680	60
Nile	461	5
Total	24439	13351.4

Source: FNC Annual Report 2003.

1 feddan = 0.42 hectares

2.3. Land Use and Combating Desertification Administration

This administration submitted the following three project proposals to MoAFF:

- Land use planning map;
- Water Harvesting in rural areas; and
- Combating desertification in some affected states.

The Arab Center for the Studies of Arid Zones and Drylands (ACSAD) has been designated to carry out the task of the preparation of a land use map with its supported legislation. Also ACSAD will help in setting a model for rehabilitation of a degraded area in North Kordofan state.

The two other proposals are still awaiting the release of the development budget.

2.4. The General Directorate for Natural Resources

The Joint assessment Mission (JAM) has accepted a proposal raised by the above mentioned institutions. This proposal deals with capacity building in the area of natural resources management.

The main components of this proposal can be classified as follows:

- i. Short courses (3 months) in natural resources management, rural planning, monitoring and evaluation;
- ii. Workshops on partnership addressing CBOs, native administration leaders, states' civil service officials; and
- iii. Equipment such as GIS Unit, computers and photocopiers.

The life span of the project is four years and it is intended to cover 4000 persons from CBOs, 800 persons from native administration and 460 from the states' officials.

C-5. List of regional and international workshops conducted in 2003

- Working on Data Management of Africover data base – Nairobi, April 2003.
- Third Session of UNFF Geneva, May/June 2003.
- Climate Change in Dry Regions of Africa, workshop, June/July 2003, Finland.
- Low cover countries workshop, Iran.
- Community Participation in Rural Development, workshop, Kenya, September 2003.

- Regional Plan for Protection of Mangrove Forests, Meeting, Jeddah, Sep. 2003.
- Biodiversity Protection in Forestry and Agriculture Sectors, Germany, -Sep.2003.
- FAO Near East Region Session, Alexandria, June 2003.
- Global Forest Resources Assessment, workshop, Rome, November 2003.
- Twelfth World Forestry Congress, Canada, September 2003.
- Workshop National Capacity Building for the Formulation of a National Strategy for Sustainable Development for Sudan. Higher Council for Environment and Natural resources, Khartoum 27-28 January 2003.

Acknowledging the severity of the problems of watershed management degradation and existence of promising opportunities and realizing the urgent need to take a concrete step to develop the immense potential of the Nile Basin, the Nile riparian countries took serious move towards cooperation in this respect and established the Nile basin Initiative (NBI). A Strategy Action Programme has been launched to identify and prepare cooperative projects in the basin. One of the seven areas of cooperation agreed upon by the Eastern Nile Riparian Countries is the Integrated Watershed Management.

C-6. Research

Research centers specializing in desert studies, land reclamation and production activities in arid areas were established by some universities. The University of Kordofan established Gum Arabic research Centre in Al Obeid, University of Khartoum established the Institute of Desert Studies and Land Reclamation in the Faculty of Agriculture in Shambat and the Wadi El Neil University also established a similar institute through the help of the Gezira University in Ed Debba in Northern state. The Desertification Department of the Environment and Natural Resource Research Institute was upgraded to become a research institute within the National Centre for Research.

A number of post graduate studies were carried out in the universities addressing the topics of desertification and land degradation using the available information technology.

D. Economic performance during the period 2002-2003

- Economic policies in Sudan were based on the National Comprehensive strategy (NCS) which covered the period 1992-2002. The NCS is a comprehensive indicative planning framework; it was broken down into three medium-term programs.
- A Medium- term program of reforms has been worked out covering the period 2002-2006. It has been a monumental task to reverse the situation by achieving high records of economic performance.

D-1. Macroeconomic indicators

- During the period (1990-2004) the Government of Sudan adopted economic policies which were put to bring socio-economic structural change through liberalization of the economy and formulation of strategies and plans. The programs and budget targeted the following:

D-1.1. Sustainable growth of GDP

According to the National Accounts, GDP growth rate averaged 6.5 percent per annum during 2002-2003. Agriculture has historically been the engine of growth but oil has emerged as a major source of economic growth. The contribution of productive sectors has shown sustainable increase as tabulated below.

Table (5): contribution of productive sector.

Item	2002	2003
Growth rate of GDP %	6.5	6
Contribution of sectors%		
Agriculture	46.0	45.8
Industry	23.1	23.9
Services	30.9	30.3

Source: MoFNE

D-1.2. Reduction of inflation rate

The inflation rate has come down to 8 percent in December 2003 compared to 8.3 percent in December 2002 reflecting a stable economic environment. This has been achieved through the adoption of a well designed package of economic policy which aimed at controlling liquidity (money supply growth rate) and rationalizing government expenditure.

D-1.3. Stabilization of exchange rate

Following the implementation of the new exchange rate, a mechanism to bridge the gap between bank and free market rate was adopted. This was finally achieved by December 1998. The exchange rate reached (262 SDD/1USD). This stability continued with an appreciated trend for the national currency in December 2003.

D-1.4. Balance of payment

The balance of payments registered a surplus. The exploitation of oil has resulted in drastic change where the trade balance deficit was reversed. In the previous years the composition of exports and imports was different where livestock was the major export and oil exports account for over 35.4 percent of Sudan's total export bills.

D-1.5. Poverty alleviation and social development

- As civil war a major factor inducing both displacement and poverty, the government of Sudan paid a lot of attention towards social development and poverty alleviation. Thus peace was a major concern for the government. The Government recently (2004) signed the Naivasha Peace Protocols.
- In its attempt to create stability, solve the social problem and alleviate poverty a draft for an effective poverty reduction strategy was formulated in 2001. The strategy aimed at fostering economic growth with an anticipated average of 7%

annually for the period 2000-2020 .A poverty alleviation unit was established in the Ministry of Finance and National Economy to coordinate effort among government units and civil society.

- The Vice President issued a decision No (235) in 2000 to formulate High Board chaired by his Excellency and membership of all federal ministers, state governors and representatives of labor and farmers union to supervise the preparation and implementation of the strategy.

D-2. The Agricultural sector

- The agricultural sector remains the main source of income and employment in Sudan. The vast majority of the poor live in rural areas. They earn their living from rainfed small scale agriculture.
- Since agricultural production is highly influenced by erratic nature of rains, employment and income in poor areas are fluctuating.
- GoS in its efforts to reduce risk of low seasonal income and consumption during the periods of natural disasters (drought and desertification) has put intensive efforts into development programs and allocated resources to combat drought and desertification.
- The development budget aims to sustain development and to improve the productivity of traditional and rainfed agriculture. Sub-sector efforts had been put to convert rainfed agricultural from subsistence to commercial production.
- The development budget also aimed at sustainable management of natural forests conservation and rational use of wood and non wood products.
- Programs of production of improved seeds, rehabilitation of pumps in mechanized farming schemes, building of rural roads to provide better access to market, improved research and extension services had been reflected in the budget.
- The budget also enhanced the efficiency of the irrigated sub-sector by regular maintenance of infrastructure in the existing schemes and introduction of new irrigated schemes. The irrigated projects i.e. establishment of Marawi Dam, and heightening of Ruseris Dam are examples of such efforts.

D-3. Financial allocations from national budget

- GOS budgeted about SDD 62742.7 million to finance the agriculture sector during the period 2002-2003. The actual payments amounted to SDD 50429.9 million constituting 80 percent of the estimated allocation. The allocations for 2002 -2003 and the share of sectors are as shown in table 6 below.

Table (6) Financial allocations for the period 2002-2003 in SDD Million.

Projects	2002			2003		
	Projection	Actual	%	Projection	Actual	%
Rain fed Agriculture	1520.6	634.4	42	2001.6	406.5	20
Min. of Agriculture	7782.0	2400.8	31	5735.5	4809.6	84
Drinking Water	4080.0	923.9	23	5891.0	1342.8	23
Irrigation	10536.4	7677.1	73	25193.6	32234.8	128
Total	23919.0	7677.1	49	38821.7	32234.8	100

Source: MoFNE

- The table is highlighting discrepancies of shares between rainfed agriculture and irrigated agriculture. The rainfed agricultural sub-sector utilized only 20 percent of the projected allocations during the period 2002–2003 while the irrigated sub-sector including irrigated schemes and irrigation projects utilized about 84 percent during the same period.
- The development budget focusing on combating drought and desertification directly through establishment of North Kordofan Rural Development Project and South Kordofan Rural Development Program. Funds allocated during the period 2002-2003 amounted to SSD 1005 millions for the two projects. IFAD offered a foreign contribution of U\$ 3.5 million. Including irrigated schemes and irrigated projects (84) interline from other side. The latest IFAD project in Kordofan is Western Sudan Resource Management Program (WSRMP) with a total budget of USD 49 million. The overall objective of WSRMP is to improve the equity, efficiency and stability of the three Kordofan states through rationalizing the regulation and use of natural resources, enabling access of poor household to productive services and fair terms of trade. The specific objectives of the program are:
 - To promote the establishment of a natural resources governance system that is equitable, economically efficient and environmentally sustainable.
 - To enable the development of effective market chains produce added values that are accessible to women and men.
 - To improve the livelihood of rural poor male headed and female headed households and their access to productive and social services.
 - To strengthen capacities at state and interstate levels
 - To manage regional natural resources in a way that is sustainable, gender and socially equitable.

D-4. Current Budget

- The government provides finance for social programs from the current budget through its efforts to build a strategic reserve and through its financial support to the social and humanitarian programs of Civil Defense Board.
- The humanitarian assistance helped the targeted groups during natural disaster events.

- The launched emergency budget for natural disasters was SSD 58988.8 millions. Its aim was to assist specific groups of rural poor through logistic support, provision of food and basic needs to affected areas.

D-5. The role of States

- The Constitution of 1998 lists the responsibilities of respective tiers of the government. The states and localities main responsibilities include social support.
- The state governments with collaboration and support of the federal government focus its development efforts to mitigating the effects of natural disaster and poverty. The federal government passed its support through the National State Support Fund. A sum of SDD 30424.1 million had been allocated to states development project and covered different social sector. These constituted about 18 percent of the total national development projects during the period 2002-2003.
- The financial support introduced by the states was estimated at SSD 58828.1 millions during the period 2001-2002 to implement programs to combat natural disasters. The actual payments for natural disaster and poverty alleviation in the states were made in form of rehabilitating schools, providing medical care, providing potable water for drinking and supporting many other social activities.

D-6. Agriculture finance and Credit

- * GOS provided facility to finance the poor through provision of line of credit managed by the Agricultural Bank. Also other commercial banks had been encouraged to provide credits to the traditional sector. The informal sector is involved in the mechanism.
- * The Agricultural Bank provided loans of SSD 15401.6 million in year 2003. 77 percent of the loans were allocated to the irrigated sub sector, 18 percent for the mechanized farming sub sector and only 5 percent for the traditional sub sector.
- * The Agricultural Bank's performance shows that the target group (small scale frames) who accounted for the bulk of the poor had the lowest priority in allocation of credits. But it provided services for rural productive families and rural women.

D-7. Contribution of International institutions to the process of poverty alleviation

UN Agencies:

- *UNDP signed the country program's document to provide USD 22.9 million during the period 2002-2006 covering the implementation of six projects. Two out of six projects are directly targeting the beneficiaries.

***UNIFPA** signed a country program to provide USD 13.5 million during the period 2002-2006. The program targeted productive women and formulation of population strategies and policies.

***UNCIEF** signed a country program to provide U\$100 million to implement projects aimed at reducing mortality of infants and children of age under five years and facilitating access of girls and pastoralists to education.

***WFP** in Sudan is addressing emergency and humanitarian needs. The program would provide U\$6 million equivalent of relief targeted towards drought and war-affected populations, the program assistance to Sudan is addressing emergency needs.

*The government is committed to provision of U\$38 million as local contribution to WFP program.

*The GOS committed U\$ 0.9 million as local contribution to help Kordofan, Darfur and Red sea states.

Table (7) below shows the contribution of UN Agencies during The period (2002 - 2006).

Table (7): contribution of UN Agencies during the period (2002-2006)

Agency	Amount (USD Million)
UNDP	22.9
UNIFPA	13.5
UNCIEF	100
WFP	6
Total	142.4

Source: MoFNE (2002).

IFAD development support is dealing directly with drought and desertification and rural development by provision of \$ 31 million during (2002 – 2003). An amount of (\$ 23 million) has been released for the implementation of a project in Kassala state which deals with the enhancement of the livelihood of the rural poor. The duration of this project would be eight years.

Table (8): IFAD's contribution to Development Budget.

Project	Performance					
	2002			2003		
	Local	Foreign	Total	Local	Foreign	Total
North and West Kordofan Drought Recovery	40	-	40	10	-	10
	11.3	376.4	387.4	50	469.6	519.6
North Darfur Drought Recovery and Food Security	26	-	26	22	-	22
South Kordofan Rural Development	140.4	417.0	557.4	81.9	743.5	825.4

Source: MoFNE (2002).

- *It could be noted that the UN agencies program in Sudan for the period (2002-2006) tend to focus on institutional support rather than direct beneficiaries support.
- *The EU support is confined to humanitarian and institutional support only.
- *IGAD and the African Group tend to focus on country coordination, conflict resolution and political issues rather than development oriented issues.
- *IFAD is providing direct support to the affected target groups.

D-8. Concluding Remarks

Though no national plan for combating desertification in the Sudan is officially adopted the activities carried out constituted a move towards natural resource conservation through the revision of legislation and institutional re-organization. Forests and other renewable natural resources law passed by the National Assembly in November 2003 included other natural resources in addition to forests, which had a law since 1932, for the first time. The law gave room to civil society organizations and private sector to participate in the conservation and sustainable management of natural resources. It also tried to integrate the natural resources units in one corporation to enhance joint integrated work but the law has not been applied in this respect for financial and administrative reasons. Coordination between official efforts, private sector and local communities afforestation programs, enrichment of range lands through seeds broadcasting and rangeland protection against fires are all measures for natural resources conservation. Preparation of forest management plans is a good measure for resource sustenance. The Afri-cover project contributed through its training program in land cover classification using satellite imageries to strengthen the national capacity for assessing and monitoring natural resources. Forestry extension programs on national and states radio and television services and workshops targeting local communities and organizations were very important capacity building measure at all levels. To have an effective contribution to the UNCCD the following has to be noticed:

- 1- The donors support to Sudan should be more active with special stress on capacity building.
- 2- The coordination capacities within the GoS agencies and units need to be strengthened. NGOs efforts should be planned and coordinated to strengthen their input instead of the prevailing fragmentation.
- 3- The coordination unit has to be activated and a coordination mechanism has to be agreed upon by all parties.
- 4- A Sudanese National Action Plan is to be formulated and officially approved to be binding to all parties concerned.
- 5- An annual work plan must be compiled and the commitment of each unit/organization clearly defined.
- 6- Regular meetings and workshops are to be held to monitor progress made in implementing the NAP.
- 7- A reporting system by the units/organizations to the coordination unit has to be defined.

**The most basic difficulty facing the traditional sector is the weak data base and lack of information. Most of the data are based on observations and personal judgment. It is very difficult to quantify neither the symptoms nor the measures to be taken by the government to solve the problems.

- **Lack of coordination between GOS institutions involved in efforts to reverse the effects of drought and desertification is major factor limiting the effects of these efforts. On the other hand, the national and international NGO's are concentrating their activities targeting these areas, but their efforts are still fragmented and lack coordination among themselves as NGOs or with the government institutions playing the same role.
- ** A specific unit for coordinating the efforts of combating drought and desertification was established, but it is handicapped by weak TOR and limited facilities.
- ** The civil war and the tribal conflicts aggravated the problems of the affected communities. The displacement of people due to war has fragmented the efforts and diluted the effects.
- ** The war also increased the dependency of the displaced population on instant relief programs rather than long term development projects.
- ** Most of the affected areas face a problem of weak infrastructure especially basic services e.g. safe drinking water and roads.
- ** The Central Government's interventions directly to mitigate the effects of drought and combat desertification are only limited to: North and West Kordofan Drought Recovery Project and North Darfur Drought Recovery Project. Both projects were involved in water harvesting and small scale irrigation programs. The remaining interventions did not directly tackle the problems, but rather addressed programs such as research and extension services irrigation infrastructure, improved seeds, etc.
- ** IFAD has launched the North Kordofan Rural Development Project, an on-going project in one of the affected states.
- ** Even though the Sudan Government has ratified the three Rio Conventions, (CBD, UNFCCC and UNCCD) synergies and coordination among these conventions are not yet achieved in reality on the ground.

Appendix - 1

Effective Participatory Processes in Formulation and Implementation of NAP and its Related Activities (2002 to 2004)¹

Activities	States	Organizations	Remarks
Afforestation: Seeds broadcasting in 50485 (feddans)(2002)	Several states	FNC in (participatory effort)	Low rainfall and low in 2002 affected the success. No progress reports were produced.
2,080,433 tree seedling were disseminated 245 popular forest were established covering 128490 (feddans) Tree plantations in 2604 public premises.	16 Different states	FNC in participation with CBOs, NGOs & others FNC in participation with others	
Forest Rehabilitation (2002) US\$114 548728? 4460 (feddans) where 90,000 seedlings were planted.	Kassala & Gedarif	UNHRO & FNC	Rehabilitation was made in refugees affected settlements areas. Participation of refugees was not reported.
10474 feddan of popular forestry Or/78 of plan for (2003) 105 popular forests were established in 25243 feddans?	In 12 different states	FNC in participation with CBOs.	
1500 seedlings disseminated (2002 – 2003)	Villages in Red Sea State	Accord and CBOs	
Rehabilitation of rangelands through seed broad casting in 50 feddans.	Haley province in Red Sea State	Accord and CBOs.	
14 community forestry associations registered (2002) Tree plantations in 7018 feddans in privately owned land in 85,000 communally managed lands.	N. Kordofan	S.O.S and FNC	Community forestry management has proved to be an effective strategy in strengthening the livelihood resource base of 32,000 people in N. Kordofan.

1,500,000 seedlings and 47.2 tons of seeds were disseminated. Village shelterbelts Tree plantations Eucalyptus and fruit trees in irrigated scheme Tree Plantations	Gomaia Khartoum Gomaia Different states	FNC & several CBOs and NGOs VES 35 families participated SECS CBOs	Tree plantations in Atbara, Al Akad, Kassala, Medani Remaitab, Halfayia, Fashir and Rahad
<u>Agroforestry and farming</u> An area of 2025 feddan, irrigated 65 families beneficiaries. Cooperative farming in 3 villages 3000 feddan (KARP) 9000 feddan Toker Delta clearance of mesquite trees Collection of 5600 sacks range plants seeds Collection of 1200 sacks of range plants	Khartoum Umm sarha Gomaia Red Sea ? Red Sea & S.O.S Red Sea Kassala N. Kordofan	? Accord in cooperation with Range and Pasture Administration. 500 households 1800 families Oxfam G.B WFP (Food for work). Range & Pasture Admin. Range & Pasture Admin.	ADS model used Revolving Fund & community participation
<u>Awareness:-</u> 45 Awareness Campaigns (2002) 290 workshops and awareness meetings held (2002) 364 Radio & TV programs 2002 6 Exhibitions (2002) 13 articles in newspapers 436 Radio and TV program	All states All states All states " " All states	FNC in participation with CBO FNC FNC " " FNC	Addressing forestry related issues " " " "

(2003 945 extension field visit and 235 workshops	All states	FNC	
Tree Planting Day (2002-2003)	All states	FNC & NGOs CBOs	S.O.S (U.K) in participation with CBOs in 8 villages
Women Forestry and Development school training program.	S.O.S. And Nile states		
General Environmental	All states	SECS in participation with National Radio and Daily papers	"
Awareness / weekly radio Program, Environmental Weekly pages in 5 Daily papers – Emphasis on plantation of tees	All states " " "	SECS	
<u>Water Development</u>			
Irrigation Cards and Electrical Water Pump	Khartoum	Participatory	
Improve Water quality & provision of water	Darfur	SC. U.K	
Better Water Management	Red Sea	S.O.S	(Khor Arbaat Rehab Prog.)
Rehab. 10 hand dug wells and 2 reservoirs and check on dams	Red Sea	Oxfam (G.B)	
Two wells and water yards	N. Kordofan, Darfur,	Japanese fund, SECS	
13 wells equipped with hand pumps	Gedarif & Sennar	UNDP & DNPP	
11 Hafirs developed	N. Kordofan	S.O.S & n WFP in participation	
Water Resources Developed	Red Sea Toker	E.U. & Oxfam (G.B) CBOs	

<u>Alternative Energy</u>			
83915 gas stoves and butane gas	Nile, Northern	FNC in	

cylinders were disseminated	Sennar, Gezira, Khartoum, Kassala, Red Sea & Blue Nile, Gedarif & N. Kordofan	participation	
Use of butane gas in brick kilns	Khartoum	FNC in participation	
500 gas stoves, cylinders & lanterns Introduction of solar energy in schools, medical centers and social clubs	Sennar, Gedarif and Blue Nile Sennar, Gedarif & Blue Nile States	UNDP & Dinder Project & VDCs MOE, Dinder Project & VDCs	
500 Stoves and butane cylinder	N. Kordofan	SECS	
<u>Food Security</u> Food Security Monitoring System	Darfur in collaboration	SC.U.K in collaboration with state authorities	2001/2002: 3 rd consecutive bad harvest. Donors addressed 42% of food needs. 2003 estimated needs 10389 MT. in Northern Darfur SFD pledge 9870 Tons (Displaced population).
Food for work	N. Kordofan & Red Sea	S.O.S Toker Oxfam G.B	

¹ Compiled from different Reports submitted to the NFP (MoAF)