

NATIONAL REPORT OF PAKISTAN

ON

THE IMPLEMENTATION OF

**UNITED NATIONS CONVENTION TO
COMBAT DESERTIFICATION (UNCCD)**

*Ministry of Environment, Local Government and Rural Development,
Government of Pakistan, Islamabad*

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ACRONYMS / ABBREVIATIONS

ABAD	Agency for Barani Areas Development
ADB	Asian Development Bank
ADP	Annual Development Programme
AKRSP	Aga Khan Rural Support Programme
AZRI	Arid Zone Research Institute
CBD	Convention on Biodiversity
CO _s	Community Organizations
MELGRD	Ministry of Environment, Local Government and Rural Development
EPA	Environmental Protection Agency
ESCAP	Economic and Social Commission for Asia and the Pacific
FAO	Food and Agriculture Organization
FATA	Federally Administered Tribal Areas
FSMP	Forestry Sector Master Plan
GEF	Global Environment Facility
GOP	Government of Pakistan
GTZ	German Technical Cooperation Agency
IFAD	International Fund for Agriculture Development
IUCN	International Union for the Conservation of Nature and Natural Resources
JICA	Japan International Cooperation Agency
MINFAL	Ministry of Food, Agriculture and Livestock
NAP	National Action Programme (of Combating Desertification)
NARC	National Agricultural Research Centre
NCCD	National Committee on Desertification
NCS	National Conservation Strategy
NFP	National Focal Point
NGO	Non-governmental organization
NRSP	National Rural Support Programme
NWFP	North West Frontier Province
PARC	Pakistan Agricultural Research Council
PCRWR	Pakistan Council for Research in Water Resources
PFI	Pakistan Forest Institute
RAP	Regional Action Programme
SAZDA	Sindh Arid Zone Development Agency
SRAP	Sub Regional Action Programme
SRSC	Sarhad Rural Support Corporation
UNCCD	United Nations Convention of Combating Desertification
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNSO	UNDP Office to Combat Desertification
WAPDA	Water and Power Development Authority
WWF	World Wide Fund for Nature

SUMMARY

Pakistan is predominantly an arid and semiarid country and is threatened with desertification and degradation of land due to rapid increase in population and growing pressure on the natural resource base to meet the needs of the people. Pakistan signed UN Convention to Combat Desertification in October, 1994 which was ratified in February, 1997.

As agreed by the countries, who are parties to the Convention, a National Action Programme to Combat Desertification (NAP) with the financial support of UNEP and ESCAP has been prepared which is in the process of revision, with the consultation and participation of all stakeholders.

The first national report of the UNCCD implementation briefly highlights the activities undertaken and the action, completed for the implementation of UNCCD, not only during the last three years but prior to that as well, in so far as they relate to the steps taken to address issues and concerns of desertification / land degradation in general and the specific measures to be adopted under the convention. These are described in the following paras.

Strategies and Priorities established within the framework of sustainable development plans and / or priorities: Activities like soil and water conservation, dryland afforestation and rehabilitation of degraded rangelands and saline areas have been part of the programmes of line agencies since independence (1947) and even during the British rule. The turning point in the awareness and need for serious thinking and concerted efforts to address problems relating to desertification / land degradation came in late sixties / early seventies. The earlier projects, however, lacked community participation perspectives and imperatives. Earlier strategies and policy initiatives to address serious issues of land degradation and resource conservation resulted in the compilation and preparation of National Commission Report on Agriculture (1988), Forestry Sector Master Plan (1992) National Conservation Strategy (1992), Sarhad (NWFP) Conservation Strategy (1996) and National Master Agricultural Research Plan (1996). These documents have already resulted in widespread acceptance of the principles of sustainable development; broader realization of the importance of natural resources and proper land use; new ways of working between sectors; institutions and disciplines; methodologies for consulting, communities, NGOs; involvement of women and group of Pakistan policy analysis experts. Pakistan has also signed and ratified the UN Convention on Biological Diversity. A climate change impact assessment and adaptation strategies study was completed in 1998.

Institutional measures taken to implement the Convention: A National Coordination Committee on Desertification (NCCD) was constituted in the Ministry of Environment, Local Government and Rural development (MELGRD) in 1998. Membership of this committee has been revised now. This committee will promote, education, public awareness and capacity building, review and update of the NAP, strengthen interagency coordination and implementation of the specific programmes for combating desertification. It is a committee which comprises different government, provincial, private sector and NGO's representatives. Scientists and university teachers are also represented. NCCD is served by technical staff of four persons who are professionals. National Focal Point (NFP) is the Director General, Ministry of Environment. This ministry is responsible for formulation, coordination and implementation of policies relating to environmental issue. Reconstitution of NCCD by raising its status with a federal minister as its chairperson has been proposed. NCCD will be served by a separate wing / cell for desertification control / arid lands development, which

will be the new NFP. Relocation of NCCD in another ministry of the federal government is another possibility depending upon the approval of the NAP. There is no separate budget for NCCD and core budget of MOELG&RD is being utilized for routine activities. NCCD will become fully functional once the NAP is approved. National Committee will be assisted by three subcommittees i.e. (a) technical committee (b) budget and finance committee and (c) information extension and communication committee.

National Conservancy Strategy has reviewed the mechanism for coordination and harmonization of action to implement policy and programmes. It sets forth the beginning of a plan to integrate environmental concerns into virtually every aspect of economic life. The achievement to strengthen the institutional mechanism are: an Environmental Protection Act was promulgated in 1997, participation of women has increased, training is being developed in environmental assessment, an independent sustainable policy institute has been established, federal and provincial governments have established environment sections in their planning departments which will facilitate the integration of NAP with national and provincial development plans. A beginning has been made in organizational development starting with the agencies most concerned with environment and natural resource management. Government has recently announced its new policy of decentralization and devolution of powers by establishing district governments of elected representatives at lower level to plan approve and undertake projects of socio-economic & rural development at local level.

Various fora already exist in the country for coordination which will facilitate the NAP. These include National Economic Coordination Committee. There are a number of other central, provincial and departmental working parties for this purpose.

The issue of capacity and institutional building has been addressed through the reports of various commissions and plans referred in foregoing paras. Existing research and development institutes will facilitate the implementation of NAP and make its structure operational. Priority is being given in the national development plan (9th five year plan) which is being prepared, for allocating resources for projects to be formed under NAP for halting land degradation, resource conservation, social action programmes and poverty alleviation. New district governments to be formed under the decentralization policy of the government will get grants and also generate funds by taxation at local level. Such projects of desertification control and resource conservation / management will get priority in terms of financial allocation from the elected representatives.

The existing plans and strategies have been reviewed and analyzed to ensure complementary action to avoid duplication. The objectives and scope of proposed programmes have been spelled out clearly and a system of diagnostic and feasibility appraisal exists at federal and provincial levels which will be strengthened further.

UNCCD principles are fully acknowledged and recognized in the National Plan and other sectoral plans / schemes. Government is determined and committed to principles of people's participation partnership and coordination at all levels and to focus resources where they are needed.

Besides the "Constitution of Islamic Republic of Pakistan" and Pakistan Penal Code, there are ordinances, rules, acts and regulations for land use, water quality, air quality, marine and fisheries, forest conservation, etc. A significant measure for natural resource conservation

and environment is the promulgation of Pakistan Environmental Protection Act (1997) in order to ensure a greater involvement of responsibility of local population NGOs and public and private sector. An Environmental Protection Council has also been established to coordinate and supervise enforcement of the provisions of the ordinance.

Participatory process in support of preparation of action programmes: There has been a continuous process of defining priorities through consultation for sustainable use of natural resources which started in 1973 and continued through 1988 and 1992 by the National Commission on Agriculture, National Conservation Strategy and Forestry Sector Master Plan. The priorities have been reviewed and revised as a result of consensus developed through an earlier US – Pakistan Joint Seminar on Arid Land and Desertification 1986. A national seminar and a workshop for reviewing the draft NAP were organized in 1994 and 1997. The new units / cells of Desertification Control Programmes at federal and provincial levels and subcommittees of NCCD will ensure exchange, circulation transfer and dissemination of the information to create awareness.

Consultative process in support of the preparation and implementation of NAP: NAP has been prepared with the financial support of UNEP and ESCAP. Once it is approved, help and involvement of international partners will be sought for implementation. Mechanism is already available for consultation with such organizations.

Measures taken or planned within the framework of NAP: Authors of NAP program relied on the diagnosis of past experience described in the national commission reports sectoral plans and conservation strategy and their own knowledge and experience.

In the backdrop of the constitutional authority and powers of the federal and provincial governments, NAP's implementation and programmes defined therein will, by and large, carried out by the provincial line departments, local government departments and rural support programmes with the involvement of community organizations and NGOs. National and provincial desertification control units / cells and NCCD will facilitate the integration of new and ongoing activities by working in harmony with provincial line agencies and other organizations involved. Implementation of projects jointly with multidisciplinary approach by participation of all the agencies involved will be attempted.

There are proposals and programmes to strengthen capacity at local level through short term professional training and farmers training. However, these activities, to a limited extent are being carried out even now under rural support programmes.

NAP document has been compiled with the participation and involvement of national, provincial / regional organizations and scientists who were consulted through workshops and seminar. Linkage developed during the formulation phase will be formalized through the provincial and national desertification committees. Relevant scientific networks at national, provincial and regional level will be strengthened.

To empower the people at grass root level, new district governments and local councils to be established will facilitate transfer of authority and responsibility to manage and develop natural resources on sustainable basis at local level, according to the needs and aspiration of the people. Environmental NGOs and rural support programmes will also be involved in organizing the communities.

A well defined elaborate and well developed financial mechanism exists in the country for the access of all the actors. Same mechanism will be used for placing funds at the disposal of different actors for the implementation. National and provincial desertification committees and the desertification control cells / units will facilitate transfer of funds and help in cutting out delays and sorting out problems, if any. In addition to the National Desertification Fund the others sources to ensure financing for combating desertification will be non-development / core budget of departments / ministries, development budget through annual development programmes, donor assistance, funds raised by the community organization for self help and funds generated by taxation by the local councils.

Benefits of investment in environmental projects of halting land degradation and conservation of natural resources are in most cases indirect and hard to quantify in terms of monetary value. Benefits of such activities under NAP are visualized in terms of direct and indirect benefits to the society and nation as a whole.

Funds are being provided at present for implementing resource management and development projects by European Union, GEF , FAO and UNDP and other donors. These projects are being implemented by Government Institutions, IUCN and WWF.

Technical cooperation is needed to improve and develop the capacity in remote sensing, early warning, assessment and mapping of desertification, management of information systems, monitoring, evaluation and impact assessment.

Review of benchmarks and indicators utilized to measure progress: There is no developed and formal national environmental and evaluation system. Federal and provincial planning departments monitor and evaluate environmental projects and programmes through a system of periodic reports and review meetings. Institutes at operational level also have a system of review and evaluation through reports and field visits. The capacity of producing impact indicators and harmonizing existing information is limited. This capacity will be developed through technical assistance under the NAP.

In Conclusion, the Government of Pakistan is committed and determined to implement UNCCD. Steps and initiatives already taken or those underway in this direction include: several policy, institutional and legal reforms and strategic changes that will facilitate the implementation of NAP; establishment of a NCCD and NFP to coordinate and over see the implementation of NAP; setting up of a task force on the initiative of UNSO for creating a national desertification fund, preparation of a draft NAP with the involvement and participation and consultation of all stakeholders in a long drawn process of three national workshops and seminars; decentralization and devolution of powers to enable public representatives at grass root level to participate in decision making that is relevant to combating land degradation; start of a social mobilization process by NGOs and the rural support programmes; enabling some environmental NGOs to create awareness and undertake small projects addressing desertification concerns.

Activities and efforts already underway by several government / private organizations, institutes, departments, NGOs and rural support programmes to combat desertification will be strengthened, integrated and supplemented through a nationally orchestrated, supported, coordinated and monitored system under the NAP. The country is thus on course of full scale implementation of the UNCCD for the benefit of the people, in general, and the deprived and resource poor rural communities who are threatened and affected by desertification.

1. STRATEGIES AND PRIORITIES ESTABLISHED IN THE FRAMEWORK OF SUSTAINABLE DEVELOPMENT PLANS AND POLICIES

1.1 National Plans and Strategies in other social areas and those developed prior to UNCCD

Pakistan comprises of four provinces namely, North-West Frontier province (NWFP), Punjab, Sindh and Balochistan. In addition, there are Federally Administrated Tribal Areas (FATA) and Federal Capital at Islamabad. Total area of Pakistan is 795, 095 km² of Punjab Sindh, NWFP and Balochistan have 206,250, 140914, 101741 and 347,190 km², respectively. The Punjab embodies 906 km of Federal Capital and NWFP covers 27,220 km² of FATA. Northern Areas and Azad Jammu and Kashmir extend over 70, 400 and 13,300 km², respectively.

About 68 million ha of land area lies in fragile regions receiving less than 300 rainfall annual. The country has highly complex and diversified agro-ecological and socio-economic set-up. One fourth of the country's land area, which is suitable for intensive agriculture, is seriously subjected to threats of wind and water erosion, salinity / sodicity, waterlogging, flooding and loss of organic matter. Watersheds in upper Indus and its tributaries suffer from unfavourable soil and moisture regimes. Accelerated surface erosion is reducing the life of Tarbela and Mangla reservoirs which provide water for 90 percent of the food and fibre production in the country. Overgrazing has brought down the productivity of rangelands to as little as 15-40 percent of their potential. The arid coastal strips arid mangrove areas are under increased environmental stress from reduced fresh water flows, sewage and industrial pollution and over exploitation of other natural resources.

Pakistan being predominantly an arid and semiarid country depends to a large extent on irrigated agriculture for production of food and fiber for the domestic needs of its people and for earning foreign exchange by export of surplus commodities and agro based industrial products. Although irrigated areas had been the focus of attention of the government policies and programmes of development and resource conservation in the past, non irrigated areas in desert arid region have also figured high in the government plans and priorities for sustainable development and management, since early seventies. The turning point in the awareness and need for diverting attention and resources to address problems of land degradation resource conservation and sustainable management and socio-economic development of dryland areas came when the report of "Barani" (rainfed areas) Commission for the largest province in the country – the Punjab, came out in 1975. Activities like soil and water conservation, dryland afforestation and rehabilitation of degraded rangelands have been part of the programs of the line agencies since independence and even during the British rule. Many projects aiming at rural development and for afforestation and development / improvement of rangelands and reclamation of saline and waterlogged areas were implemented in sixties, seventies and early eighties with the assistance and support of foreign donor / aid agencies. The aspects of community participation and multi-sectoral coordination and implementation did not receive adequate attention.

The policy initiatives to address some of the concerns of land degradation and desertification, among other issues of sustainable development of agriculture and conservation and wise use of natural resources, to complement the NAP, are the preparation of Reports of National Commissions, Master Plans and Conservation Strategies as detailed below:

- (i) Punjab Barani Commission Report, 1973
- (ii) National Commission on Agriculture, 1988
- (iii) Forestry Sector Master Plan, 1992
- (iv) National Conservation Strategy, 1992
- (v) Sarhad Provincial Conservation Strategy, 1996
- (vi) National Master Agricultural Research Plan, 1996

With the addition of the National Action Plan to Combat Desertification (draft), these documents have already resulted in:

- a widespread acceptance of the principles of sustainable development as a unifying approach to policy.
- a broader realization of the importance of natural resources and proper land use to the mandate of government agencies.
- new ways of working between sectors, institutions and disciplines e.g. cross sectoral working groups and involvement of women.
- methodologies for consulting communities, NGOs and other stakeholders.
- a group of Pakistan policy analysis experts
- institutional transformation e.g. an independent Forestry Commission is being created in NWFP and the Forest Act, 1927 is being revised.

An independent Sustainable Development Policy Institute with a broad research mandate has also been established under National Conservation Strategy. The National Conservation Strategy and the National Action Programme to Combat Desertification, describe the condition of country's deteriorating resource base and the implication of this deterioration for a natural resource based economy.

Pakistan is a signatory to the UN Convention on Biological Diversity (CBD), which was ratified in 1994. A biodiversity Action Plan for Pakistan has been prepared and approved by the Pakistan Environmental Protection Council. This plan has been prepared with the support and assistance of IUCN and WWF. The Action Plan provides a brief assessment of the status and trend of biodiversity, outlines strategies goals and objectives and identifies a plan of action that includes coordination arrangements and implementation measures. The action plan sets out a strategy for action under 13 main components corresponding to the articles of CBD.

A climate change impact assessment and adaptation strategies study, sponsored by the Ministry of Environment, Local Government & Rural Development and supported by UNEP / GEF was compiled in February 1998.

The objectives and strategies of the Eight Five Year Plan (1993-98) included sustained increase in agricultural productivity to address social and economic disparities in marginal and neglected areas and to reverse the trend of the degradation of natural resources. Priority was given in financial allocation to improving land and water management practices, improving productivity of barani (rainfed areas), drainage and land reclamation and encouraging participation of women. Special allocation was made for projects falling in the area of renewal natural resources conservation and management of forests rangelands, watersheds. Priority is being given to these areas in terms of allocation in the 9th five year plan which is being prepared.

2. INSTITUTIONAL MEASURES TAKEN TO IMPLEMENT THE CONVENTION

2.1 National Coordination Board and the role of National Focal Points

A National Coordination Committee on Desertification (NCCD) comprising 19 members was formed in the Ministry of Environment Local Government & Rural Development in October, 1998. This Committee was headed by the Secretary MELGRD. In May 1999 this committee was reconstituted / revised. The committee now comprises 23 members. The list of the members of the committee is at Annex-I. Members of the committee represent relevant federal and provincial departments / organizations, NGOs, universities and research and development institutes / organizations. The terms of the reference of the committee are:

- Review and periodic update of National Action Plan for Combating Desertification to address the changing needs.
- Strengthen Interagency coordination and advise the respective ministries / departments / institutions on the specific actions to be taken by them for combating desertification.
- Coordinate and facilitate research on the causes and consequences of desertification and coordinate information for reporting to CCD Secretariat.
- Promote education and public awareness and capacity building of stakeholders for combating desertification.
- To identify and recommend projects for donor support.

NCCD is an inter-ministerial and inter-departmental body in the federal Ministry of Environment, Local Government & Rural Development, with representatives from the Provincial Agri Departments, heads of federal units dealing with the research, management and development of renewable resources like land water, forests and wildlife. Provincial agencies specifically created for development and management of arid lands / deserts area; teachers / scientists of universities involved in research in arid areas; federal ministries of Planning, Agriculture Livestock, Water & Power; representatives of rural support programmes in the provinces and Northern Areas who are working through village organizations / communities for rural development in association with line agencies; and NGOs active in environmental programmes have also been given representation in the NCCD.

NCCD under the existing setup is served by a technical staff of four persons:

- (i) **Director General (Environment)**
A professional Environmental Engineer with Master's Degree and 20 years experience of fieldwork, management, policy formulation and administration.
- (ii) **Deputy Secretary (Land / Water)**
A biological Scientists with Master Degree and 24 years experience of field and secretariat work.
- (iii) **Assistant Director (Land / Water)**
A Scientist with Masters degree and 10 years experience in the Ministry of Environment.
- (iv) **Environment Specialist**
A scientist with Doctorate degree and 20 years experience

At the federal level, Ministry of Environment, Local Government and Rural Developments is the concerned administrative organ of the state at the highest level to formulate and coordinate and implement policies relating to environmental issues and to over see the implementation of National Action Plan. The Ministry has the mandate to advise the Government and liase with the national and international organization on matters relating to Environment. Placement of NCCD in this Ministry makes it the advisory body to MELGRD to deal with national and international organizations and other ministries and departments in the federal and provincial systems in matters relating to combating desertification.

There is no separate budget for NCCD, nor there are special funds at present at the disposal of NCCD. The core budget of the Ministry of Environment is utilized for routine activities of organizing meetings and establishing linkage with the members and other organizations / departments.

NCCD is likely to become fully functional once the process of approval of National Action Plan is completed. NCCD will also be served by a new federal section / wing for desertification control to be created as proposed in the NAP. This wing will be staffed by a team of trained, experienced and qualified professionals with adequate budget equipment and funds. New National Coordination Committee or board will have three subcommittees: (a) Technical Committee (b) Budget and Finance Committee (c) Information Extension and Communication Committee to advise the main Committee/board and to act on its behalf to carryout the functions to be performed by the National Committee.

Matters like mode of operation, composition and status of information data will become apparent and visible once the National Coordination Committee on Desertification is reconstituted with its subcommittees after the approval of NAP, based on its provisions.

2.2 Institutional Framework for Coherent and Functional Desertification Control

National Conservation Strategy has reviewed the mechanisms for coordination and harmonization of action to implement policy and programmes to make wise and proper use of land, water and other renewable natural resources to address issues of land degradation. It sets forth the beginning of a plan to integrate environmental concerns into virtually every aspect of economic life. Some achievements to strengthen the institutional framework as a result of the implementation of NCS are:

- an Environmental Protection Act was promulgated in 1997
- participation of women has increased
- training is being developed in environmental assessment
- an independent Sustainable Development Policy Institute has been established
- federal and provincial governments have established environment sections in their planning departments. This will facilitate integration of NAP with the National and Provincial Development Plans and scrutiny of policies and programmes for natural resource sustainability, just as they are tested and examined for financial feasibility.

There are recommendations for reviewing and amending, if necessary, the mandates of line agencies to focus on the maintenance and wise use of natural resources and increased use efficiency of critical resources. Incorporating environmental considerations into the business of line agencies and reorienting them to a facilitative mode of development is a huge task. A beginning has been made in organizational development starting with the agencies most concerned with environment and natural resource management.

Government has announced a plan of decentralization and devolution of power by establishing district governments to plan, approve and undertake programmes and projects of socio-economic and rural development at local level with the resources and funds allocated directly by the Government. Development agencies and line departments are likely to be reorganized and made responsible for incorporating programmes of short medium and longterm benefits for the local communities at local level.

Various fora for coordination already exist which will facilitate the NAP. Development planning in the country has been articulated through a set of such fora, which cut through departmental red tape and allow decision to be taken in real time. They range from an apex body, the National Economic Council (NEC) which is specified in the constitution and is headed by the Chief Executive. Its Executive Committee (ECNEC) meets more frequently to take decisions on important matters. Besides these institutions, there are a hierarchy of central provincial and departmental working parties that consider and approve development projects upto specific sizes.

The Government of Pakistan has decided recently to transfer power to the vast majority at grass root level and evolve District Governments. The five basic guiding principles for the District Governments are:

- (i) let the people be master of their own destiny

- (ii) subordinate Government functionaries to the elected representatives and make them serve the people
- (iii) provide the common man with speedy justice at the door steps
- (iv) provide fiscal autonomy to the districts making them self financing
- (v) achieve all this through creation of a system where the district becomes the basic Governance and Development unit of the country

The issues of capacity and institutional building has been addressed through the National Conservation Strategy and in the light of the recommendations of the National Commission on Agriculture, Forestry Sector Master Plan and National Master Agricultural Research Plan. Some of the important institutes already created which will facilitate implementation of the NAP and make its structure operational are:

- (i) University for Arid Agriculture at Rawalpindi.
- (ii) Arid Zone Research Institutes at Quetta, D.I. Khan, Umarkot, Bahawalpur.
- (iii) Cholistan Institute of Desert studies of Islamia University, Bahawalpur.
- (iv) Desert Research Centre of Pakistan Council of Research Water Resources, Bahawalpur.
- (v) Rangelands and Land & Water Research Institutes of PARC, Islamabad.
- (vi) National Arid land Research and Development Institute of Ministry of Food and Agriculture, Islamabad.
- (vii) Agency for Barani Area Development (ABAD), Rawalpindi.
- (viii) Cholistan Development Authority, Bahawalpur.
- (ix) Sindh Arid Zone Development Authority, Huderabad.
- (x) Pakistan Forest Institute, Peshawar.
- (xi) Soil Survey of Pakistan, Lahore.
- (xii) Zoological Survey of Pakistan, Karachi.

2.3 NAP as part of National Economic and Social Development and Environment Protection Plan.

NAP is in the process of finalization based on the comments / input of all relevant stakeholders. Hopefully the NAP will be finalized by the end of June 2000 and its adoption by the Government is expected by September 2000 and the implementation will start by December 2000.

Priority has been given in the draft national development plan (9th plan) for allocating funds for projects aiming at protection conservation, rehabilitation and improvement of environment and promotion of sustainable development of renewable natural resources, social action programmes and poverty alleviation in dryland regions and areas threatened with desertification. Under the decentralization and devolution of power policy of the government, district governments will get special grants from the Government and would also generate funds by taxation at the local level. District assemblies and local councils comprising elected representatives of people in districts where land degradation and desertification problems are severe would naturally attach priority in terms of resource allocation to carryout projects based on the programmes identified in the NAP.

The existing plans and strategies have been reviewed and analyzed to ensure complimentary action to avoid duplication. The objectives and scope of proposed programmes have been spelled out clearly in the NAP and a system of diagnostic and feasibility appraisal exists at the federal and provincial levels and the Committees for approving the projects ensure synergy and complementarity.

The UNCCD principles are fully acknowledged and recognized in the National Plan, National Conservation Strategy, Forestry Sector Master Plan. National Reconstruction Bureau, federal cabinet, provincial cabinets and National Economic Council and its executive Committee are committed to principles of participation of local people and communities, partnership and coordination at all levels and to better focus financial human, organizational and technical resources where they are needed.

The activities that have sub regional and regional dimensions in which linkage will be established between NAP, SRAP and RAP are research and training desertification information system and assessments mapping and monitoring of desertification.

2.4 Coherent and functional legal and regulatory framework.

An analysis of existing legislation bearing on environment and national resource conservation was made in the Pakistan National Conservancy Strategy report (1992). Besides the “Constitution of Islamic Republic of Pakistan” and Pakistan Penal Code, there are ordinances, rules, acts and regulations for land use, water quality, air quality, marine and fisheries, forest conservation, parks, wildlife, livestock, etc. The penalties for environmental offences are generally punitive rather than reformatory. A significant and positive legislative measure for natural resource conservation and environment is the promulgation of Pakistan Environmental Protection Act (1997). In order to ensure a greater involvement and responsibility of local population, NGOs, public and private sectors and other stakeholders a “Pakistan Environmental Protection Council” has been established to coordinate and supervise enforcement of the provisions of the ordinance, besides its other responsibilities, which include consideration of the integration of the principles and concerns of sustainable development into national development plans and policies and to provide guidelines for the conservation of renewable natural resources.

The new initiative and policy of establishment of district assemblies / councils will go a long way to strengthen the capacity of local population and local authorities to participate in decision making that is relevant to combating land degradation.

3. PARTICIPATORY PROCESS IN SUPPORT OF PREPARATION OF NATIONAL ACTION PROGRAMME

3.1 Effective participation of actors in defining national priorities

The work of defining national priorities for wise, proper and sustainable use of renewable natural resources to address problems of land degradation started first in 1973, when a series of reports on different subjects, prepared by experts with the consultation of farmers of other concerned were compiled by an Agriculture Enquiry Committee. A more comprehensive report of National Commission on Agriculture was prepared in 1988. This report was based on the detailed studies by different groups of administrators, scientists, university teachers, farmers, representatives of industries AND NGOs representing a large number of sectors and sub-sectors of agriculture. The report identified priorities for sustainable development and management of land water and other renewable resources, along with all matters / subjects associated with the rural development and agriculture. The priorities / programmes were again identified in the National Conservation Strategy. This document was prepared by a team of experts, based on a number of sectoral studies and papers with the consultation of all concerned stakeholders, including farmers, NGOs and women organizations.

A Forestry Sector Master Plan was prepared in 1992 focusing on forests, rangelands wildlife watersheds, which identified national priorities in these areas. Drawing upon the reports of these national commissions, master plans and strategy, a multidisciplinary team of scientists representing diverse fields relating to land resource management and utilization and a representative of NGO involved in desertification control program reviewed revised and updated the national priorities.

Draft of the NAP based on these priorities was reviewed in a national workshop in 1994, inaugurated by the Minister for Food Agriculture and Livestock, which was attended by 60 senior professionals from federal, provincial and international agencies and NGOs operating in Pakistan. List of the participants is given at Annexure–II. As a result of substantial inputs in the draft report by the workshop participants the draft NAP was revised. A conference of Asian NGOs on the implementation of the UNCCD was organized by Society for Conservation and Protection of Environment (SCOPE) in 1996. This conference was attended by around 100 delegates from 24 countries and was inaugurated by the President of Pakistan. This conference provided a forum in which importance of involving end users at every level of program design and implementation was highlighted.

The second draft of NAP was reviewed in a National Seminar organized by the Ministry of Environment, Local Government and Rural Development in 1997. The views / comments / suggestions of a large number of scientists experts representing all the concerned ministries, research organizations, departments and NGOs who attended this seminar were again incorporated in the NAP, which was circulated widely in the country for comments. NAP is being finalized incorporating the comments / suggestions of the individuals / groups / organizations who have now proposed some changes / amendments.

Earlier a regional workshop to establish a multi-stakeholders coalition for the implementation of UNCCD in Asian Region was held in Islamabad in 1999. The workshop was organized by SCOPE in collaboration with UNCCD secretariat, UNEP, Commonwealth Foundation, Japan Foundation Asian Centre and MELGRD. Gender participation has been ensured in policies by involving women organizations in the planning workshops. Elected woman

representatives in the District Assemblies and Tehsil and Union Councils, who will form a large proportion of those bodies, will also address gender issues at the local level.

The new political structure in the country will involve a trilateral distribution of responsibilities in priority identification process and uptake of local concerns at national level between the center, the provinces and districts and councils below representing the basic (lowest) rung of the democracy.

The new unit / cell / department of desertification control and arid land development to work as secretariat of the National Desertification Control Committee and the "Information Extension and Communication Subcommittee" of the national committee will ensure exchange, circulation, transfer and dissemination of information to create awareness about the threats of desertification its socio-economic dimensions and priorities areas for addressing these concerns.

4. CONSULTATIVE PROCESS IN SUPPORT OF THE PREPARATION AND IMPLEMENTATION OF NATIONAL ACTION PROGRAMME AND PARTNERSHIP AGREEMENTS WITH DEVELOPED COUNTRIES PARTIES AND OTHER INTERESTED ENTITIES

4.1 Effective support from International Partners

Initially financial and technical support of United Nations Environment Programme (UNEP) and Economic and Social Commission for Asia and the Pacific (ESCAP) was sought by Government of Pakistan for the preparation of "National Action Programme to Combat Desertification" UNEP and ESCAP representatives attended only the preliminary and plenary meetings of the workshop to identify issues and priorities. The actual work of the preparation of the draft NAP was done by a team of local scientists and experts. Once the program is approved, help and involvement of international partners will be sought for implementation after identifying projects of interest to developed countries parties and international agencies like UNDP, UNEP, FAO, IFAD, World Bank and Asian Development Bank. Organizations with interest and expertise in environment and renewable resource management like IUCN and WWF will be involved with donor support. Mechanism is already available in the country for consultation with such organizations and donors through the Economic Affairs Division of Government of Pakistan. Needs and proposals for such support will be identified and reviewed by the national and provincial cells / departments for desertification control and development of arid lands, and cleared by the National and Provincial Desertification control Committees.

5. MEASURES TAKEN OR PLANNED WITHIN THE FRAMEWORK OF ACTION PROGRAMME INCLUDING MEASURES TO IMPROVE THE ECONOMIC ENVIRONMENT TO CONSERVE NATIONAL RESOURCES AND PROMOTE THEIR SUSTAINABLE USE TO IMPROVE INSTITUTIONAL ORGANISATION TO ENHANCE KNOWLEDGE OF DESERTIFICATION AND ITS CONTROL

5.1 Adequate diagnosis of past experience

As explained under section 4.1, preparation of action program was preceded by a number of conferences, national commissions, conservancy strategy, master plans, for natural resource management, development and improvement. Panel of experts and study groups of scientists farmers interacted with all the stakeholders before formulating their sectoral reports incorporated in these documents. Authors of the national action program relied on diagnosis of past experiences described in these documents and also on their own knowledge gathered by working in different organizations / institutes who involve farmers, affected groups and end users in their research and development programs.

5.2 Established technical programmes and functional integrated projects to combat desertification

The mechanism of integration of ongoing projects with NAP process has to be seen in the context of constitutional powers and authority of the federal and provincial governments to manage develop and use the land resource. Pakistan is a federated state comprising four provinces, Punjab, Sindh, Balochistan and North West Frontier Province (NWFP). In addition there are three federal areas the Federal Capital, the Federally Administered Tribal Areas (FATA) and the Northern Areas. The state of Azad Jammu and Kashmir (AJK) is in administrative Union with Pakistan. The authority and powers of the federal and provincial governments are determined through two lists of subjects, called the Federal Legislative List and the Concurrent Legislative List. Most of the services in such fields as agriculture, health, education and rural communication are administered by the provincial government. However in these areas the national policy and strategy are initiated by the federal government. Federal government can also establish national institutes for scientific and policy research in the subjects which are under the administrative jurisdiction of the provinces. There are separate provincial departments of agriculture, livestock, forestry, wildlife and fisheries in the provinces. It is therefore the provinces who administer the public and private land and regulate its use. Projects of land use and developments are therefore implemented by the line departments in the provinces. Annexure (III) contains detail of activities carried out or under implementation by some of the important organizations / institutes relating to desertification control.

In this backdrop of constitutional authority and power, NAP implementation and programmes defined therein will mostly be carried out by the provincial line departments, local government departments and rural support programmes with the involvement of community organizations. Detailed projects will be developed under the programs of NAP, as a result of joint planning and consultation of all the actor involved and the ongoing projects will be integrated with NAP process in the similar way. The National and Provincial

desertification control / arid lands development cells / units will facilitate this integration by working in harmony with the provincial line departments.

The new actions proposed and planned in the NAP to combat desertification are:

- (i) Creation of separate units / cells/ departments at federal and provincial level to deal with planning and execution, coordination, monitoring of anti-desertification and sustainable land use and development program in the country.
- (ii) A high level national committee at federal level and similar committees at provincial level to over see and coordinate the implementation of NAP and to act as advisory body to the federal and provincial governments in all matters relating to the plan and policies for desertification control, sustainable development and management of arid and semi-arid areas and integration of anti-desertification and anti-drought programs in national development plan.
- (iii) Social mobilization of the communities by the NGOs and the rural support programs for their involvement in the implementation of the projects identified with their participation.
- (iv) Implementation of projects jointly with multidisciplinary approach by participation of all the line agencies involved as well as the rural communities.

5.3 Training and human resource development

There are proposals and programs to strengthen capacity at local level through short term professional's training, farmer's training, women's training workshops and seminars.

5.4 Action Programme implemented in compliance with priority fields setout in the convention.

The action program is being finalized. However, it conforms to the priority fields set out in the convention and technical and financial programs have been prepared, based on the information derived from the Convention.

Drought has been of common occurrence in dry/desert areas of Pakistan. Currently, desert areas of Cholistan, Tharparkar and Balochistan (Chagai and Kharan districts) are experiencing drought for the last two years due to failure of rain. Government has mobilized its resources by providing food, water, health care and feed for livestock. Some NGOs are also active in relief activities.

5.5 Linkage achieved with sub-regional and regional action programmes

National action program document has been compiled with the participation and involvement of national and provincial / regional organizations / departments and scientists / representatives of the provinces were consulted. Activities to be carried out at the provincial level and the lead agencies involved have been indicated in the NAP. Linkage developed

during the formulation phase will be formalized through the National and Provincial Desertification Control Committees. Keeping in view the programs identified in the NAP, provinces will develop projects conforming to the regional needs. Similarly the relevant scientific network at national and provincial / regional levels will be strengthened on the basis of provisions made in the NAP, coordinated by the national and provincial desertification control / arid lands development units / cells.

5.6 Effectiveness of measures in local capacity building

To empower the people at grass root level the systems of establishing district governments and local councils will facilitate transfer of authority and responsibility to manage natural resources at the local level according to the needs and aspirations of the rural communities. Training of farmers, workers and women in various subjects relating to natural resource management will be organized as provided in the NAP. Environmental NGOs and national / provincial rural support programs will also be involved in organizing and identifying specific needs of the various groups.

5.7 Partnership Agreements Applied

Necessary details given under sections 3 and 4.

6. FINANCIAL ALLOCATIONS FROM NATIONAL BUDGETS IN SUPPORT OF IMPLEMENTATION AS WELL AS FINANCIAL ASSISTANCE AND TECHNICAL COOPERATION INCLUDING THEIR INFLOWS PROCESS TO IDENTIFY THEIR REQUIREMENTS, AREA OF FUNDING AND SETTING PRIORITIES

6.1 Adopted Financial Mechanisms

A well developed elaborate, and well defined financial mechanism already exists for the access of all the actors: implementing agencies, departments, local governments project directors and rural support programs to existing source of funding. Funds in the national and provincial budgets are channeled during the federal and provincial finance departments and reach the functionary or office at local level who has to disburse in accordance with the laid down accounting procedure. The same mechanism will be used for placing funds at the disposal of different actors for the implementation. The national and provincial desertification control committees and the desertification control cells / units which will be the focal points for NAP, will facilitate transfer of funds on time by cutting out unnecessary delays.

The source visualized to ensure financing for combating desertification are:

- (i) Non development / core budget of the national and provincial ministries / line departments / institutions.
- (ii) Development budget through annual development programs of federal provincial governments and district governments.
- (iii) Donor assistance reflected through ADP Projects or through directly implemented projects.

- (iv) Funds raised by the community organizations for carrying out schemes on self help basis through rural support programs / NGOs with the involvement of line agencies.
- (v) National Desertification Fund (to be created)

International partners for supporting the financial mechanism will be located once the NAP is finalized and approved.

Benefits of investment in environmental projects of halting degradation of land and conservation of natural resources in most cases are indirect and some times hard to be assessed in terms of their monetary value. In many cases the benefits accrue after a longer period. The investment in activities identified in the NAP are therefore visualized in term of their indirect and direct benefit to the society and the nation as a whole. It is also hard to quantify spillover of beneficial effects and investment in one sector or area over other sectors /areas of natural resources management and human activities.

6.2 National Action Programme Financing

The sources likely to be available for financing NAP have been mentioned under section 7.1. Many activities / projects under the priority programs identified in the NAP are already under implementation of the various development and research organizations of the federal and provincial governments with their existing resources. A few NGOs are also active in certain area. Besides supporting new projects under the NAP emphasis will be placed on continuation of the ongoing activities with modified approach of sustainable integrated development and management and use of natural and human resources, community participation, coordination between line agencies, rural support programmes, NGOs / CBOs and joint implementation between government departments. Capacity and capability of the different groups of individuals and institutes will however be strengthened. Additional funds for new activities / projects to be carried out in conformity with the NAP will be provided in the manner indicated under section 7.1

National Desertification Fund: With the initiative of the office to Combat Desertification (UNSO) of UNDP, a task force has been created by Government of Pakistan to prepare the design and the modalities of National Desertification Fund. The list of the members of the task force is at Annexure - IV. Terms of the reference of this task force are:

- (i) To review the concept paper of UNSO on National Desertification Fund
- (ii) To work out *modus operandi* of the proposed fund.
- (iii) To workout the modalities to mobilize the fund.
- (iv) To design the financial mechanism with the purpose to mobilize and channel financial resources rapidly and efficiently to support community level anti-desertification and drought mitigation activities.
- (v) To chalk out modalities to give the fund a legal status

International donor agencies including UNDP European Union, GTZ are already active and implementing some environmental projects by direct assistance to government or

through environmental international NGOs. Once the NAP is approved and the setup to implement is fully functional a request will be made based on the portfolio of new projects of interest to international agencies / partners.

6.3 Technical Cooperation

Technical cooperation is needed to improve and develop the capacity in:-

- Remote sensing, early warning, assessment and mapping of desertification.
- Information system on desertification
- Monitoring evaluation Impact Assessment.

So far, technical assistance received for desertification control in Pakistan has been limited. More technical assistance will be sought from country parties of CCD or of developed country parties.

7. REVIEW OF BENCHMARKS AND INDICATORS UTILIZED TO MEASURE PROGRESS AND AN ASSESSMENT THEREOF

There is no formal and special national environmental monitoring and evaluation system. Federal planning division and provincial planning departments have monitoring and evaluation units, which monitor and evaluate projects of natural resource development, environment, agriculture and industrial development through a system of quarterly bi-annual and annual reports. Periodic review meetings are also held with the implementing federal and provincial departments. Institutes at operational level also have a system of review and evaluation of the field projects through periodic reports field visits. The capacities of producing impact indicators and harmonizing existing information systems in related field is very limited and needs to be developed and expanded. Provisions of NAP will be used to develop this capacity and the technical assistance of international partners will also be sought.

**LIST OF THE MEMBERS OF THE NATIONAL COORDINATION
COMMITTEE TO COMBAT DESERTIFICATION (NCCD)**

i.	Secretary M/o. Environment, Local Government And Rural Development, Government of Pakistan, Islamabad	Chairman
ii.	Director General (Environment) M/o. Environment, Local Government And Rural Development, Government of Pakistan, Islamabad	Member Secretary
iii.	Inspector General of Forests M/o. Environment, Local Government And Rural Development, Government of Pakistan, Islamabad	Member
iv.	Representative of M/o. Food, Agriculture and Livestock Government of Pakistan, Islamabad	Member
v.	Chief (Environment) Planning & Development Division, Government of Pakistan, Islamabad	Member
vi.	The Secretary, Department of Agriculture Punjab, Lahore	Member
vii.	The Secretary, Department of Agriculture Sindh, Karachi	Member
viii.	The Secretary, Department of Agriculture NWFP, Peshawar	Member
ix.	The Secretary, Department of Agriculture Balochistan, Quetta	Member
x.	The Secretary, Department of Agriculture Azad Kashmir, Muzafferabad	Member
xi.	The Secretary, Department of Agriculture and Forests, Northern Areas, Gilgit.	Member
xii.	Representative, Pakistan Agricultural Research Council, Islamabad	Member
xiii.	Representative,	Member

	Pakistan Council for Research in Water Resources, Islamabad.	
xiv.	Representative, WAPDA	Member
xv.	Director General, Soil Survey of Pakistan, Lahore	Member
xvi.	Representative, University of Arid Agriculture, Rawalpindi	Member
xvii.	Representative, University of Balochistan, Quetta	Member
xviii.	Director General, Cholistan Development Authority, Bahawalpur.	Member
xix.	Director General, Sindh Arid Zone Development Authority, Hyderabad.	Member
xx.	Representative, Society for Conservation and Protection of Environment (SCOPE) Karachi.	Member
xxi.	Representative, Agha Khan Rural Support Programme (AKRSP) Gilgit	Member
xxii.	Representative, National Rural Support Programme Islamabad.	Member
xxiii.	Representative, Sarhad Rural Support Corporation (SRSC) Peshawar	Member
xxiv.	Representative, Balochistan Rural Support Programme Quetta.	Member

**LIST OF PARTICIPANTS IN THE NATIONAL WORKSHOP
ON COMBATING DESERTIFICATION IN
PAKISTAN, NARC, ISLAMABAD**

FEDERAL

- | | | |
|-------|-----------------------------|--|
| i. | Dr. Zafar Altaf | Secretary, Ministry of Food, Agriculture and Livestock, Government of Pakistan, Islamabad |
| ii. | Mr. Abeedullah Jan | Inspector General of Forests, Ministry of Food, Agriculture and Livestock, Government of Pakistan, Islamabad |
| iii. | Dr. Bashir Ahmad Chandio | Chairman, Pakistan Council for Research in Water Resources, Ministry of Science and Technology, Government of Pakistan, Islamabad. |
| iv. | Dr. Khalid Mahmood Siddiqui | Director General, Pakistan Forest Institute, Peshawar |
| v. | Dr. Bashir Hussain Shah | Director, Forestry Research Division, Pakistan Forest Institute, Peshawar |
| vi. | Mr. Kalimullah Shirazi | Deputy Secretary, M/o. Environment, Local Government and Rural Development, Islamabad |
| vii. | Mr. Muhammad Shabbir Baig | Director, Soil Survey of Pakistan, Ministry of Food, Agriculture and Livestock, Lahore |
| viii. | Dr. Waqar Ahmad Malik | Commissioner, Special Crops, Ministry of Food, Agriculture and Livestock, Islamabad |
| ix. | Dr. Sardar Mohammad Rafiq | Range Management Officer, Pakistan Forest Institute, Peshawar |
| x. | Dr. Mohammad Noor | Assistant Silviculturist, Pakistan Forest Institute, Peshawar |

PROVINCIAL

- | | | |
|-------|---------------------------|---|
| xi. | Choudhry Afzal Haq | Chief Conservator of Forests, Sindh Forest Department, Hyderabad |
| xii. | Mian Bashir Ahmad | Managing Director, Cholistan Development Authority, Bahawalpur |
| xiii. | Malik Fateh Khan | Chief, Agency for Barani Areas Development, Punjab Agriculture Department, Rawalpindi |
| xiv. | Dr. Ghulam Ahmad Chaudhry | Director, Barani Agriculture Research Institute, Punjab Agriculture Department, Chakwal |

xv.	Choudhry Riaz-ul-Hassan	Conservator, Range Management Circle, Punjab Forest Department, Lahore
xvi.	Mr. Shah Rehman	Director, Soil Conservation, Balochistan Forest Department, Mastung
xvii.	Dr. Rafiq Ahmad	Professor, Department of Botany, University of Karachi, Karachi
xviii.	Mr. Muhammad Shafiq Chaudhry	Director, Cholistan Institute of Desert Studies, Islamia University, Bahawalpur
xix.	Mrs. Khalida Khan	Director, Centre for Integrated Mountain Research, University of the Punjab, Lahore
xx.	Mr. Mohammad Ibrahim	Divisional Forest Officer, Range Management, Sindh Forest Department, Karachi
xxi.	Mr. Muhammad Feroze Awan	Divisional Forest Officer, Range Management, Azad Jammu and Kashmir Forest Department, Muzaffarabad
xxii.	Mr. Muhammad Ahmad Khan	Deputy Director, Soil Conservation, Agriculture Department Punjab, Rawalpindi
xxiii.	Dr. Muhammad Bashir	Agronomist, Soil Conservation, Agriculture Department Punjab, Rawalpindi
xxiv.	Mr. Muhammad Arshad	Research Officer, Cholistan Institute of Desert Studies, Islamia University, Bahawalpur
xxv.	Mr. Nazir Ahmad Malik	Sub-Divisional Forest Officer, Punjab Forest Department, Rawalpindi
xxvi.	Syed Wasif Hussain Bokhari	Project Incharge, Range Research Station (Thal), Pakistan Agricultural Research Council, Bhakkar

PAKISTAN AGRICULTURAL RESEARCH COUNCIL

xxvii.	Dr. Muhammad Hanif Qazi	Member, Crop Sciences, Pakistan Agricultural Research Council, Islamabad
xxviii.	Dr. Sulaiman Hamid	Ex-Member, Natural Resources, Pakistan Agricultural Research Council, Islamabad
xxix.	Choudhry Zafar-ud-Din	Consultant / Ex-Secretary, Pakistan Agricultural Research Council, Islamabad
xxx.	Mirza Muhammad Ashraf	Director, Forestry and Environment, Pakistan Agricultural Research Council, Islamabad
xxxi.	Mr. Parvaiz Khaliq	Technical Staff Officer to Member Crop Sciences,

		Pakistan Agricultural Research Council, Islamabad
xxxii	Mr. Imtiaz Ahmad	Technical Staff Officer to Member Natural Resources, Pakistan Agricultural Research Council, Islamabad
xxxiii	Dr. Abdul Sattar Alvi	Director, Arid Zone Research Institute, Brewery Road, Quetta
xxxiv	Dr. Muhammad Sharif Zia	Director, Land Resources Research Institute, National Agricultural Research Centre, Islamabad
xxxv	Mr. M. M. I. Nizami	Principal Scientific Officer, National Agricultural Research Centre, Islamabad
xxxvi	Mr. Mushtaq Ahmad Khan	Principal Scientific Officer, Bio-saline Agriculture Research Station (PARC), Sadhoke, Lahore
xxxvii	Mr. Abdul Aziz Khan	Principal Scientific Officer, Vertebrate Pest Control, National Agricultural Research Centre, Islamabad
xxxviii	Dr. Noor Mohammad	Director, Rangeland Research Institute, National Agricultural Research Centre, Islamabad
xxxix	Dr. Nasir Mahmood Butt	Senior Scientific Officer, Rangeland Research Institute, National Agricultural Research Centre, Islamabad
xl	Mr. Muhammad Asghar	Senior Scientific Officer, Rangeland Research Institute, National Agricultural Research Centre, Islamabad
xli	Dr. Maqsood Anwar	Senior Scientific Officer, Rangeland Research Institute, National Agricultural Research Centre, Islamabad
xlii	Mr. Imtiaz A. Qamar	Senior Scientific Officer, Rangeland Research Institute, National Agricultural Research Centre, Islamabad
xliii	Mr. Muhammad Ajmal Khan	Senior Scientific Officer, Rangeland Research Institute, National Agricultural Research Centre, Islamabad
xliv	Mr. Maqsood Ahmed	Senior Scientific Officer, Rangeland Research Institute, National Agricultural Research Centre, Islamabad
xlv	Mr. Muhammad Fiaz Joyia	Senior Scientific Officer, Rangeland Research Institute, National Agricultural Research Centre, Islamabad

NON GOVERNMENTAL ORGANIZATIONS

xlvi	Mr. Ashiq Ahmad Khan	Director Conservation, World Wide Fund for Nature Pakistan, Department of Environmental Studies, University of Peshawar, Peshawar
xlvii	Mr. Abdul Latif Rao	Programme Director, The World Conservation Union, Islamabad
xlviii	Syed Ayub Qutab	Executive Director, Pakistan Institute for Environment Development Action Research (PIEDAR), Islamabad
xlix	Dr. Javed Ahmed	Forestry Programme Manager, Aga Khan Rural Support Programme, Gilgit, Pakistan
I	Dr. Shamshad Khan Khattak	Regional Programme Officer, National Rural Support Programme, Rawala Kot, Azad Jammu and Kashmir
li	Mrs. Helga Ahmad	Chairperson, IR&SD, House 6, St. 32, F-8/1, Ibd.

INTERNATIONAL

lii	Dr. Till Darnhofer	Deputy Director, Desertification Control Program Activity Centre, United Nations Environment Programme, Nairobi, Kenya
liv	Mr. U. Wai Lin	Chief, Environment Section, Economic and Social Commission for Asia and the Pacific, Bangkok, Thailand
Iv	Dr. Mahesh Banskota	Deputy Director General, International Centre for Integrated mountain Development, Kathmandu, Nepal
Ivi	Mr. Harm H. Heemstra	Chief Technical Advisor, Food and Agriculture Organization Integrated Range Livestock Development Project / Balochistan Forest Department, Quetta
Ivii	Dr. Euan Thomson	Team Leader, Arid Zone Research / MART-ICARDA, Arid Zone Research Institute, Quetta
Iviii	Dr. Murray D. Dawson	Technical Advisor, Soil Conservation ADB Consultant / Punjab Agriculture Department, Rawalpindi
lix	Dr. Tony Archer	Consultant, Range Management & Feed Resources, Pakistan Agricultural Research Council, Islamabad
Ix	Mr. A. S. Bokhari	Consultant, USAID / Winrock International, Islamabad
Ixi	Mr. Mahmood Iqbal Sheikh	Consultant, GOP-USAID Forestry Planning and Development Project, Islamabad

**ACTIVITIES AND PROJECTS RELATING TO DESERTIFICATION CONTROL OR
TO ADDRESS SOME OF THE CAUSES AND EFFECTS OF DESERTIFICATION
CARRIED OUT OR UNDER IMPLEMENTATION**

SUPPORTED BY INTERNATIONAL DONOR AGENCIES

- Implementation of National Conservation Strategy and Provincial Conservation Strategy for NWFP and Balochistan Provinces.
- Systems planning for the management of protected areas.
- National Drainage Programme: To minimize saline drainage surplus and to restore environmentally sound irrigated agriculture in Pakistan.
- Plantation of saline resistant mangrove forests.
- Salinity education programme at the primary school level. This forms part of broader UNDP programme. Enhancing the Communication Environmental and Sustainability functions of the International Waterlogging and Salinity Research Institute (IWASRI)
- Grass root assistance to poor farmers of Sindh affected by waterlogging and salinity problems.
- Environmental Rehabilitation in NWFP and Punjab
- Mountain Areas Conservancy Project.
- Forestry Sector Development Project, Punjab
- Forestry Sector Development Project, NWFP

PAKISTAN COUNCIL OF RESEARCH IN WATER RESOURCES

- Desertification assessment and mapping of the Cholistan Desert
- Rain water to harvesting in Cholistan
- Tree Plantation by using rainwater and ground saline water.
- Sand dune fixation and stabilization
- Reclamation of desertified land by the introduction of JOJOBA, Atriplex.
- Design and preparation of sand trappers.

PAKISTAN AGRICULTURAL RESEARCH COUNCIL

- Development of desert reclamation techniques by planting of drought tolerant plants with rainwater harvesting, pitcher irrigation, drip irrigation.

- Establishment of Shelterbelts and windbreaks for protecting crops and soil conservation.
- Introduction and propagation of promising arid land plants like salt bush, Salicornia, Tamarix, Vetiver grass, Jojoba.
- Agro Forestry systems of raising trees in conjunction with crops.
- Establishment of forage pasture research units in the provinces.
- Development of commercial ranching model.
- Reclamation of saline and waterlogged area by planting salt tolerant trees and shrubs.
- Renewable energy for water pumping
- Soil and Water Conservation
- Ground water management
- Irrigation and water management

UNIVERSITY OF AGRICULTURE, FAISALABAD

Organization of a Seminar in Collaboration with Asian Productivity Organization on soil degradation process, management and economic analysis.

NATIONAL RURAL SUPPORT PROGRAMME

Organization of CBOS and VOS for natural resource management, human resource development infrastructure development and micro credit in arid areas of Attock, Rawalpindi, Chakwal, Bahawalpur, Bahawalnagar, Rahimyar Khan, Bhahkar, D.G. Khan, Khusab, Muzaffargarh, Turbat, Badin Kohat and Karak districts.

AGENCY FOR BARANI AREAS DEVELOPMENT

- Soil and Water Conservation in rainfed areas
- Afforestation and range development
- Barani Area Development
- Water resources development
- Women training and extension
- Farm to market roads
- On farm water management
- Micro enterprise development

- Rural infrastructure development

ARID ZONE RESEARCH INSTITUTE

- Arid Horticulture
- Establishment of grasses on Sand dunes.
- Medicinal plants of arid areas.

CHOLISTAN DEVELOPMENT AUTHORITY

- Colonization and allotment of Government land.
- Development of Water resources and surveys for sweet ground water.
- Development of communication facilities
- Drought relief and management

SINDH ARID ZONE DEVELOPMENT AUTHORITY

- Development of water resources
- Communication facilities
- Agricultural and livestock development and relief and rehabilitate extension

WATER AND POWER DEVELOPMENT AUTHORITY

Salinity control and reclamation programmes

CHOLISTAN INSTITUTE OF DESERT STUDIES

- Selection and propagation of salt tolerant and drought resistant shrubs, trees and grasses.
- Studies on desert plants with emphasis on their morphogenic and ethnobotanical characters and medicinal value.
- Studies on nomadic lifestyle and socio-economic aspects of the desert dwellers.

PAKISTAN FOREST INSTITUTE

Dryland Afforestation, Agro Forestry, Rangeland Development and Management.

SOIL SURVEY OF PAKISTAN

- Land Capability Classification
- Integrated surveys for land use recommendations

ARID ZONE RESEARCH INSTITUTE, QUETTA

- Soil and Water Conservation
- Range / Livestock development and management
- Socio-economic and anthropological studies of arid area / desert communities
- Selection of food / forage / crops for arid areas

NATIONAL ARIDLAND DEVELOPMENT AND RESEARCH INSTITUTE

- Agro forestry, dry afforestation
- Range / Livestock management
- Dry land farming
- Soil and Water Conservation
- Applied research on camels
- Cultivation of seabuckthorn

NGOs

- Establishment of a global NGO network (RIOD) with Society for conservation and Protection of Environment (SCOPE) as its focal point
- Organization of a meeting to establish a coalition of Asian NGOs for desertification control by SCOPE
- Community management of irrigation water with participatory approach in Pakistan by Pakistan Institute for Environment Development Action Research (PIEDAR)
- Dissemination of information to stakeholders about UNCCD in regional language by provincial network "RIOD", SCOPE and "Baanhn Beli"
- Construction of 5 water harvesting dams through local farmers in sindh by "Baanhn Beli" and reclamation of 3000 hectares of degraded land.
- Health cover to 28000 people living in 40 villages of Diplo and Mithi Taluka against an infectious disease by "Baanhn Beli" health team
- An assessment of Therparker Arid Zone (1999) by Thardeep Rural Development Programme Sindh.

**LIST OF THE MEMBERS OF THE TASK FORCE ON
NATIONAL DESERTIFICATION CONTROL FUND**

- | | | |
|-------|---|----------|
| i. | Mr. Mehboob Elahi
Director General (Environment)
M/o. Environment, Local Government
And Rural Development, Islamabad | Chairman |
| ii. | Representative
Ministry of Food, Agriculture & Live Stock
Government of Pakistan, Islamabad | Member |
| iii. | Mr. Muhammad Hussain Niswana
Deputy Financial Advisor (Environment)
Government of Pakistan, Islamabad | Member |
| iv. | Assistant Chief (Environment)
Planning and Development Department
Government of Pakistan, Islamabad | Member |
| v. | Representative
Forest and Wildlife Department
Government of Punjab, Lahore | Member |
| vi. | Representative
Forest and Wildlife Department
Government of Sindh, Karachi | Member |
| vii. | Representative
Forest and Wildlife Department
Government of NWFP, Peshawar | Member |
| viii. | Representative
Forest and Wildlife Department
Government of Balochistan, Quetta | Member |
| ix. | Mr. Rafiq Ahmad
Inspector General of Forests
M/o. Environment, Local Government
And Rural Development, Islamabad | Member |
| x. | Representative
ABAD
Shamsabad, Murree Road, Rawalpindi | Member |
| xi. | Deputy Engineering Advisor
NDP
Office of the Chief Engineering Advisor /
Chairman Federal Flood Commission,
Ministry of Water & Power,
Government of Pakistan
Islamabad | Member |

xii.	Managing Director Cholistan Development Authority Bahawalpur	Member
xiii.	President Bahan Beli, Hyderabad	Member
xiv.	President SCOPE, Karachi	Member
xv.	Programme Manager National Rural Support Programme, Super Market F-6, Islamabad	Member
xvi.	Dr. M.S. Lashri Trust for Voluntary Organization, House 28, Main Embassy Road, G-6/4, Islamabad	Member
xvii.	Representative UNDP, Islamabad	Member
xviii.	A Representative Pakistan Farmers Association	Member
xix.	Mr. Kalimullah Shirazi Deputy Secretary (Land / Water) M/o. Environment, Local Government And Rural Development, Islamabad	Member / Secretary