

**NATIONAL REPORT OF ISLAMIC REPUBLIC OF AFGHANISTAN
ON
THE IMPLEMENTATION OF
UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION
(UNCCD)**



**MINISTRY OF AGRICULTURE AND IRRIGATION
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Acronyms

Complete Name	Abbreviation
Afghan Conservation Corps	ACC
Afghanistan National Environmental Protection Agency	ANEPA
Afghanistan Compact	AC
Afghanistan National Development Strategy	ANDS
Afghan Tourist Organization	ATO
Collaborating National Agencies	CNA
Department of Forestry and Rangeland	DFR
Department for International Development	DFID
Environmental Act	EA
Energy and Environmental Program	EEP
Food and Agriculture Organization	FAO
German Agency for Technical Cooperation	GTZ
Global Environment Facility	GEF
Interim Afghanistan National Development Strategy	IANDS
International Development Association	IDA
Integrated Water Resource Management	IWRM
Millennium Development Goal	MDG
Medium Size Proposal	MSP
Ministry of Agriculture and Irrigation	MAI
Ministry of Public Health	MoPH
Ministry of Energy and Water	MEW
Ministry of Information, Culture and Tourism	MICT
Ministry of Rural Rehabilitation and Development	MRRD
National Adoption Program of Action	NAPA
National Action Program	NAP
National Capacity Self-Assessment	NCSA
National Development Framework	NDF
National Development Strategy	NDS
National Focal Point	NFP
National Program for Forestry and Range Management	NPFRM
National Risk and Vulnerability Assessment	NRVA
National Solidarity Program	NSP
Sustainable Land Management	SLM
Transitional Islamic Government of Afghanistan	TIGA
Technical Assistances	TA
United Nations Office for Project Services	UNOPS

Preface

Afghanistan has signed the United Nation Convention to Combat Desertification on December 26th 1995. Therefore the government of Afghanistan intends to create a suitable mechanism among all relevant organization to implement its obligation towards the Convention of Combating Desertification. At present time the government first priority is to develop a National Action Plan (NAP) for combating desertification. Through consultation with the relevant line ministries, international agencies and communities the national action plan will be prepared in the near future.

Due to the absence of (NAP), the present submission is the preliminary document on which in future the reports on implementation of UNCCD Declaration and Guidelines will be based.

In the past Afghanistan was not assigned to prepare and submit the reports on the implementation of UNCCD, therefore, the principles, guidelines and methodology designed for preparation of the Third National Report have not been considered in this submission, as discussed.

This document is an outline which indicates factors influencing the spread of desertification in Afghanistan, policies and programs and activities that are relevant to UNCCD.

Executive Summary

Context:

Afghanistan is a land locked country covering a total area of 652,225 sq km in the southwestern part of Asia. The climate of the country is continental and sub-tropical. The total annual precipitation of the northern, southern and western parts of the country is less than 200 mm, which makes these regions susceptible to periodic drought. In contrast, the average annual rainfall of the south eastern parts, as a result of Indian Monsoon, is estimated to be in the range of 320-1100 mm. Therefore these areas are covered by dense Oak forests and various conifer tree species. Over 80% of the country population is dependent on agricultural activities as the main livelihood options. Of the total land area of 65 million hectares, only 12% is arable. The existing irrigation system is operating at low efficiency rate of about 25%, which indicates that there is considerable scope for reducing wastage of water and increasing irrigation area. At the same manner, the agriculture resources have been under considerable pressure with the increasing population and refugee return.

The prolonged civil war combined with almost seven years severe drought has reduced cultivating areas stridently and impacted livestock's adversely. The rangeland has been grazed by herd under sedentary, seasonal trans-human and migratory management system. Deterioration of plant cover through overgrazing led to increased soil erosion and reduced infiltration and more rapid run-off. Forests have suffered extensive damage during the over twenty years of conflict from which the country is now emerging. At the current rate of deforestation (continuation of illegal clear cutting), there will be no forest left 30 year from now.

Key issues and constraints:

Afghanistan Natural Resources Sector (ANRS) has been faced with the following key issues and constraints:

1. Absence of land tenure security.
2. Limited access to improved crop production technology.
3. Inadequate involvement of private sector in the delivery agricultural services.
4. Limited access to animal health facilities,
5. Lack of suitable environment protection systems.
6. Unsustainable water resource management.
7. Lack of investment in agricultural production.
8. Lack of effective laws and regulations for land cover protection and improvement.
9. Lack of integrated approach to natural resource management.
10. Dependence of some communities on forest resources as the sole source of livelihood.
11. Frequent drought, floods and forest damage.

Sustainable Development Plans and Policies:

In March 2002 following the Tokyo ministerial meeting, a multi-donor mission visited Afghanistan to conduct an environmental needs assessment. Consulting with key stakeholders, the mission prepared a preliminary assessment report which constitutes on environment management framework such as policy, institutional and donor coordination; and technical assistance for short and medium term implementation.

This document will be used as an inception point for coordination of assistance to improve the environment in Afghanistan.

To achieve peace, security, social justice and equality in Afghanistan, the National Development Framework (NDF) was formulated in 2002, with a vision of an integrated approach with active participation of communities and the private business sector. The National Development Framework outlined major national policy and strategic issues for the recovery and reconstruction of the socio-economic sector. The document prescribes the role of the government as regulator, policy/strategy maker, monitor and evaluator, while production and management of the economy is assigned to the private sector.

In light of this document, several laws, policies, strategies and programs have been developed, among which the policy and strategy for the rehabilitation and development of agriculture and natural resources sector, the 5 years Master Plan of the Ministry of Agriculture and Irrigation (MAI), the Environmental Act (EA), community-based forestry , rangeland management sub-sector policy and strategy are worth mentioning. The overall objective of all these policy documents is to improve livelihood of rural families which will result in their active participation in the national economic growth that will be guaranteed through development of efficient and sustainable use of water, agriculture, forestry and rangeland based on adoption of sound environmental practices.

The London Conference held on 31 January - 1 February 2006 provided an opportunity for Afghanistan Government to present the Interim Afghanistan National Development Strategy (IANDS) which sets out its political and economic plans and priorities for the next five years. Thus, environment is under one of the three pillars “Economy and Social Development”. The Afghanistan Compact states “... in line with Afghanistan’s Millennium Development Goal (MDGs), environmental regulatory frameworks and management services will be established for the protection of air and water quality, waste management and pollution control, and natural resource policies will be developed and implementation started at all levels of government as well as the community level”. This strategy underlines the importance of sustainable land management.

Institutional measures taken by the National Program, which could be used towards implementation of the UNCCD

The following steps have been taken towards reduction of accelerated process of land degradation.

Endorsed by the government, the five-year Master Plan of the Ministry of Agriculture and Irrigation (MAI) incorporated several projects relevant to forestry, watershed management, rangeland and wildlife management, combating desertification and land degradation.

Supported by the World Bank (WB), International Development Association (IDA) and Japan Social Development Program (JSDP), the Ministry of Rural Rehabilitation and Development (MRRD) has been executing the National Solidarity Program (NSP), with the aim of reducing of poverty through establishing rural community based organizations which identify and implement local infrastructure investments. Altogether, 3026 sub-projects have been completed in 34 provinces, 274 district and 17,278 communities in support of mitigating land issues.

The Ministry of Energy and Water (MEW) has designed different long term projects, which will be implemented during the next 5 years. The implementation of these projects will contribute effectively towards combating desertification. To rehabilitate and improve energy and water resources, attention is given to institutional strengthening and capacity building including establishment of National River

Basin, establishing agencies to improve watershed management, construction of small and medium scale irrigation schemes and hydro-power stations.

In response to desertification issues, the government of Afghanistan appointed the Deputy Minister of Agriculture and Irrigation as the UNCCD National Focal Point (NFP) an Advisory Board Committee on sustainable land management was established and began functioning. Supported by UNDP/GEF the MAI has organized an ambitious capacity building program for Sustainable Land Management (SLM) with the first workshop conducted on May 2005. The Ministry received a grant from UNDP/GEF to prepare a Medium Size Project (MSP) proposal for capacity development and mainstreaming of Sustainable Land Management (SLM) according to commitments under UNCCD and to support the Government articulation of a National Action Plan for Sustainable Land Management.

Contribution of International Agencies and the Government of Afghanistan towards Sustainable Land Management (SLM)

Protected Areas and Wildlife Conservation System in Afghanistan: The Asian Development Bank (ADB) in support of Global Environment Facility (GEF) and Department for International Development (DFID) has been assisting the government to protect biodiversity and develop participatory management plan for wildlife conservation in some protected areas.

Establishing Agro-Metrological Services and Irrigation Improvement: The Food and Agriculture Organization (FAO) has been providing the government through the Ministry of Agriculture and Irrigation (MAI) in establishing 21 weather stations, 88 rain gauges and 72 crops monitoring points to collect data on weather condition for food security and agriculture analysis. FAO also completed the cleaning of irrigation canals throughout the country - improving irrigation water delivery to an estimated 12,000 farm families. This organization particularly assisted communities in Farah province, which suffered from series of sand storms.

Forest Rehabilitation Program: United Nations Office for Project Services (UNOPS) has been assisting the government through the Ministry of Agriculture and Irrigation (MAI) to establish Forestry Demonstration and Training Centers in Takhar, Herat, and Ghazni provinces. The project aims to provide alternative sustainable livelihood through the creation of home and community based tree nurseries, to increase natural vegetation through community supported labor intensive approach and to improve technical and institutional capacity at community and Government level, particularly, Pistachio forest rehabilitation.

Wildlife conservation society joint project: The Ministry of Agriculture and Irrigation initiated wildlife, rangeland, livelihood, forest protection project in Wakhan, Hazarajat and eastern forest complex. The main objectives of this project are; 1) identify threats and design initiatives for their eradication; 2) environmental education, establishment of community resources committees, and 3) establishment of a four-county trans-boundary peace parks in Pamir.

UNEP National Capacity Self-Assessment (NCSA) and National Adoption Program of Action (NAPA) for Afghanistan: aim to develop a program of action to climate change through assessing vulnerability and identifying priority adoption measure and to assess Afghanistan's needs to meet the obligation of the Climate Change, Biodiversity and Desertification Conventions.

Green Afghanistan Initiative (GAIN): GAIN has been jointly initiated by UN country team such as UNICEF, UNAMA, UNEP, WFP and UNDP, in close collaboration with the Ministry of Agriculture and Irrigation and National Environment Protection Agency (NEPA) of Islamic Republic of Afghanistan. The

objectives of the GAIN are reforestation, environment protection and development of a green environment in the country.

Building Capacity to Address Land Related Conflict and Vulnerability in Afghanistan (The World Bank Group Request for IDF financing): The purpose of the request is to build the capacity of the Land Commission and communities to formulate policies and adopt practices that address land related conflict and vulnerability. The program will focus on analytic work and pilot initiatives which will serve to inform subsequent policy dialogue. The output will be preparation of the final report, which will indicate ways for resolving land disputes.

1. Introduction:

Desertification in Afghanistan is characterized by overgrazing and accelerated process of soil erosion and salinization which includes more than 75 percent of the total land area in the arid northern, western and southern regions. The eroded forest land and rangeland are the main areas affected by desertification. Afghanistan's few remaining natural forests, mixed conifer forest in the south-east and pistachio in the north have been depleted illegally. At present rate of felling, Afghanistan will have no natural forest at all in 30 years¹. Rangelands have also been eroded, a process accelerated by widespread conversion into rain fed cropland. Much of this converted land is too steep for cropping. Both these trends are continuing now.

The cost to Afghanistan of desertification is colossal. Valuable forest resources are being lost. Traditional access to the remaining grazing lands is being disrupted, for both migratory and sedentary herdsmen. Rapid run-off is having a negative impact on water supplies to irrigation schemes. Irreversible soil erosion is taking place in many areas. Superimposed on these problems is an increasing hazard of drought.

The government of Afghanistan has now given high priority to measures which address these issues. The National Program for Forestry and Range Management (NPFRM) was drafted with the purpose of encouraging sustainable forestry and rangeland uses through community-based forestry and range land management. The program will concentrate on i) facilitating the development of community capacities; and ii) providing physical inputs and technical advice for the establishment of forestry and rangeland management projects by the communities.

The next step of the government is to develop a National Action Program (NAP) to combat desertification. An advisory committee has been established, which monitors its completion and endorsement. Due to the absence of National Action Plan (NAP) for combating desertification the present report is focused on governmental and international Agency activities, which have relevance to UNCCD.

This report is the first and preliminary document on which the report on implementation of UNCCD Declaration will be based. In addition, an outline of the country context is elaborated, including policy and plans, and the projects currently being implemented that are relevant to UNCCD.

2. Country context:

Afghanistan is a land locked country, has an area of 652,225 sq km. It's bordered on the east and south by Pakistan, on the west by Iran, on the northwest by Turkmenistan and on the north by Tajikistan and Uzbekistan.

Great mountains ranges of Pamir and Hindukush divide the country with high areas of plains in the north, a mountainous area in the central part, mountain and food hills in the east and southwest and lowlands in the south and west of the country. These mountain ranges cover a major part of the country with the average peak elevation being about 3,000 meters above sea level. The highest peak of the ranges is located on Safedkoh (White Mountain) with an elevation of more than 6000 meters above sea level. The northern parts of Hindukush, with an elevation of 300-400 meters form most of the flat surfaces.

The Hindukosh Mountains occupy two third of the country, except Safedkoh ranges to the south east of Afghanistan which possess dense vegetation because of Indian Monsoon. The remaining parts, especially

¹ Technical Annex. Securing Afghanistan's Future. January 2004

in the north and north western parts either support scattered vegetation of trees and shrubs or are bare with little or no vegetation.

One-sixth of the country landscape is comprised of deserts, which lie continuously under the threat of wind erosion and sand dunes movement. To the southeast of the country, there is a vast desert, called Marji joining the Lota desert of Iran to the west side of the country. In Afghanistan all flat surface areas represent a part of deserts located in Iran, Middle Asia, India and China. Afghanistan has a variety of different climates, resulting from its geographical latitude (29° 33 - 35° 40 North latitude). The climate of the country is continental and sub-tropical. The Marji desert of the south west and the desert of the northern parts which continues to the banks of Amu-Darya, have sub-tropical climate, while the remaining areas and mountainous parts of the country have a continental climate²

The high mountains of south east play an important role in condensing the water vapor, which has been brought from the Indian monsoon. These condensed water vapors are later on converted into seasonal rainfall. Furthermore the mountain ranges, located in Laghman province form a major obstacle against transportation of the vapors to the other parts of the country. This has caused the region to be dry.

The rainfall happens during the winter and spring seasons, often in form of snow and rain. The snow form of precipitation supplies the basic source of water for the growth season. The total annual precipitation of the southern, northern and western parts of the country is less than 200 mm, which makes these regions susceptible to periodic drought. In contrast, the average annual rainfall of Noorestan, Kunar, Paktia, Nangrahar and Laghman provinces, which are effected by Indian Monsoon, is estimated to be in the range of 320-1100 mm. Therefore this area is covered by dense forests of oak and various conifer tree species.

The availability of water, which is unreliable in the length of growing season are key factors determining crop intensity. About 30% of the total arable and permanent cropland was irrigated in 1999, much of it through community-based small and medium scale irrigation system. The existing irrigation systems are operating at low efficiency rates of about 25%, which indicates that there is considerable scope for reducing wastage of water and increasing the irrigated area. Estimates in 2003 were that 1.31 million hectares of land were intensively irrigated.

Beside traditional irrigation system (traditional surface system, springs, karezes and wells) large modern system were managed until the late 1970, such as Helmand and Nangrahar valley irrigation authorities. It is estimated that the total irrigated area in Afghanistan was 3.2 million hectares of which 1.55 million was intensively irrigated and 1.65 million intermittently irrigated. As shown in table-1 below, the potential for irrigation rehabilitation, improvement and further development is very large

² Nedialkov,S.T etitude sur la classification ligneous natural in Afghanistan. UNDP/FAP/67

Table 1: Existing Irrigation for Rehabilitation and Potential new Irrigation area

Items	Hectares ,000
Area irrigated before the war to be brought back to permanent irrigation through rehabilitation works	240
Area under irrigation that require improvement / rehabilitation works to allow more intensive cultivation	1,310
Area under intermittent irrigation that can be brought to intensive irrigation mainly through development of storage infrastructure	953
Area never irrigated that could be brought to intensive irrigation through development of new irrigation schemes	

Over 80% of the population is dependent on the agricultural and natural resources management sector. With the increasing population and the return of refugees, the agriculture resources base is under increasing stress. The last seven years of drought, has considerably reduced the annually cultivated rain fed area.

Wheat is the main staple food crop in Afghanistan and cultivated by almost all farmers using both irrigated and rain-fed land. The wheat per capita consumption in Afghanistan is estimated to be among the highest in the world, with recent per capita estimates of 152 kg per year.³

Both forest land and rangeland are legally defined as public land, held in trust by the state on behalf of the people of Afghanistan. In the case of forest land, it has been policy for Government to take the leading role in the management and protection of natural forests and forest lands.

Rangelands and former natural forest land occupy virtually all the catchments areas which feed Afghanistan's productive agricultural land, the irrigation schemes. Deterioration in upstream land cover through overgrazing and felling of the natural forest has led to reduced infiltration and more rapid run-off. This disrupts the steady flow of irrigation water which the farmers need to produce good crops. Damaging floods have also become more frequent.

The rangelands are grazed by herds under sedentary, seasonal trans-human and migratory management system. Access to rangeland has been governed by traditional arrangements and agreements, some of which are said to be supported by documents issued under previous political regimes. As in many pastoral countries these arrangement have never been implemented in a manner which allow herdsmen to manage and invest in rangeland as farmers do in farmland. The key characteristics of most rangeland in Afghanistan are those of a shared, free resources in which the quantity and quality of the pasture in any one year is governed primarily by the rainfall and snow in that year. The shared nature of many pastures without clear long term management agreements means there is no incentive for herdsmen to conserve it or invest in it. Indeed the incentive is for herdsmen under such condition to graze their animal to the maximum extent in the short term regardless of the impact on the pasture.⁴

Generally, low quality of the rangelands and the absence of management control system have direct implications for the strategies adopted by livestock owners. Indicative figures in Table (2) portray

³ Technical Annex. Securing Afghanistan's Future. January 2004

⁴ A Framework for a National Program for Community Forestry, Range Management and Wildlife Ministry of Agriculture and Irrigation July 2004

production of feed for livestock in a moderate rainfall year. The figures show that rangelands and cropland sources (crop residues and fodder crops) each contribute about half the food which animals consume. Migratory herds rely almost wholly on rangelands. This means sedentary herds receive more than half their food from cropland sources. The implication is that sedentary livestock owners, many of whom have interests in farming, have acted to maximize their herds through a reliance on cropland sources over which they have greater measures of management control.

Table 2: Estimated Livestock Fodder and Pasture Production (2002-2003)

Fodder Crops and Plant Residue	Million tones
Irrigated wheat residues	5.03
Rain fed wheat residues	2.18
Barley and rice residues	1.40
Sub total crop residues	8.61
Fodder crops	unknown
Medium- production rangelands	8.75
Low production rangelands	0.43
Total rangelands	9.18
Grand total (crop residues and rangelands)	17.79

There is substantial evidence that the natural forest cover of Afghanistan has steadily declined over the last 150 years. This process accelerated sharply over recent years. In 1971 the only surviving natural forests were some 1,313,000 hectares of mixed forest in the southeast, and some 450,000 hectares of pistachio forest in the north.⁵

The main reason for the recent rapid decline (over 50% reduction)⁶ in the natural forest cover has been the inability of the government to implement its direct role of managing and protecting the resource. Due to the war condition many forest areas have come under the influence of commanders and their supporters. In the southeast, this has led to widespread felling, fuelled by a high international demand for the high quality timber, and facilitated by the absence of control over smuggling. In the north, pistachio forests have been felled both by commanders and by local people who have lost their former livelihoods. These trends are continuing at present.

The impact of drought and conflict on rangeland has been quite different. On the one hand, drought has reduced the production of livestock feed, both from pasture and from crop residues/fodder crops. In the dry rangelands of south and west Afghanistan, it appears that a combination of drought damage to the range and falling ground water tables have caused deterioration in the livestock and human carrying capacity that cannot be practically reversed in the short and medium term (Van Engelen, 2004). Elsewhere in the country, drought damage has been significant, but less severe.

At the same time, a combination of drought and conflict has produced a sharp fall in animal numbers, and a corresponding fall of some 20% in the requirement for livestock feed (Table 3). The reduction in animal numbers is due partly to herd and flock losses within Afghanistan during the conflicts and partly to out-migration to neighboring countries, mainly Pakistan. These trends have affected migratory livestock owners in particular.

⁵ Naseri, Gh.N. Natural Woodland and Forests of Afghanistan. July 2004

⁶ Afghanistan Post-Conflict Environmental Assessment Switzerland, 2003

Table 3: Estimated Livestock Population and Feed Requirement 1995 and 2002

Livestock	1995 Population (million)	1995 feed Requirement (million kg dry matter)	2002 Population (million)	2002 Requirement (million kg dry matter)
Cattle	3.69	8.42	3.71	8.48
Sheep	22.01	7.03	8.77	2.80
Goats	8.93	2.44	7.28	1.99
Donkeys	1.02	2.09	1.59	3.26
Camels	0.28	1.10	0.17	0.64
Horses	0.37	1.17	0.14	0.45
Total	36.39	22.25	21.66	17.62

The main institutional problems currently faced by the Department of Forestry and Range Management under the Ministry of Agriculture and Irrigation, at the national and provincial level, stem from the previous policy of managing the natural forest resource. Involvement with of people and communities in this management has been negligible. The official emphasis has been on protecting the natural resources, denying access and use to people for the most part, and allowing access (for example to the pistachio crop), on a strictly controlled basis. By 2003, it is fair to say that many of the Department staff had become well aware that the policy and practices of direct management of natural forest were not working, and there was no apparent way in which they could act to stop the continuing depletion of the natural forest resource.

In the case of rangeland, the Department's approach centered around the extension of various technical measures to increase the production of pastures, including rotational grazing showing how herdsmen were to invest in such measures on rangeland which were public land and over which they little effective management control.

In this light, it becomes clear that an effective approach to the institutional problems lies not in trying to restore the previous regime Departmental strategies and practices now aim at defining a new policy and strategy which address the urgent natural resource problems.

The combined pressures of conflict, civil disorders, massive population movements, lack of governance and drought have degraded Afghanistan's Environment, and it is now a major constraint to the nation's reconstruction. These factors have damaged Afghanistan's natural resources base, including the rapid depletion of water, soil, air and forest resources as well as biodiversity and wildlife.

According to DAI/Earth Sat only 10% of the land area is used for agriculture. Half of this is rain fed and half is irrigated. Afghanistan has an extremely low level of forest cover. The conifer and Oak forests in the south east and pistachio forests in the north covered 1, 9 million ha of the total land area. Rangeland covers about 30% of the territory. The agriculture sector is the most important sector in the country upon which about 80% of the people depends for livelihood and is the greatest contributor to the growth of national economy.

Due to the last seven years (1998-2006) of drought coupled with 23 years of war conditions, the agriculture sector in Afghanistan has been greatly damaged. According to UN estimates, agriculture production and livestock have been reduced to 40-50 percent.⁷

⁷ Technical Annex, Natural Resources January 2004.

To supply sufficient water for irrigation and drinking purposes, tube wells are drilled illegally. This activity has been accelerated during the years of drought, which caused severe dropping of water table and reducing the efficiency of traditional irrigation system (Karezes).⁸

Forest and woodlands, throughout Afghanistan are being cut down without consideration for their ecological, environmental, and economical worth. It is observed that entire plant covers are being removed for fuel wood and rangeland is being converted for dry land cultivation. Thus the process of deforestation combined with overgrazing and drought has led to increased soil erosion, land slide, watershed degradation; loss of biodiversity, loss of livelihood sources, desertification, land degradation and reduced ecosystem services.

Due to the loss of stabilizing vegetation, sand dunes movement has occurred (in the north and south west parts of the country). The sand dunes are presently moving to onto agricultural as well as into human settlements. Because of the topography of the landscape, arid climate and barren nature of the land, more than 80% of land is potentially subjected to soil erosion. Soil fertility is declining, salinization is increasing, water table has dramatically fallen, de-vegetation is extensive and soil erosion by water and wind is widespread. It has been estimated that 29% of the total area is affected by water erosion, 5% by wind erosion and 3% by salinity.

The banks of rivers specially the banks of Amu Darya in Afghanistan are not stabilized to protect valuable irrigated land and infrastructure from the raging a river flooding torrents. Each year a vast amount of land is washed away in floods.

The sever drought of the past seven years coupled with human activities has caused the process of desertification in several areas of Afghanistan, especially in arid, semi-arid and dry sub-humid parts of the north south and west of the country.

Afghanistan's rangelands are at particular risk of desertification. In these areas, widespread conversion of rangeland to rain fed agriculture and heavy grazing reduced vegetation and is exposing soil to erosion. Lack of required data, indicating trends in land condition makes it difficult to assess more precisely the situation and degrees of threat created by this phenomenon.

The above mentioned environmental degradation has caused drought, floods, decrease in production, increase in prices, unemployment, and lack of access to health care, internal displacement and depletion of wild life habitat. These are presently the typical economic and environmental shocks in the country. People have lost their households assets, income generating opportunities and finally, the control over their normal living conditions.

3. Sustainable Development Plans and Policies

During the last four decades, Afghanistan has undergone drastic policy changes, from a semi market-led economy of the 1960 and 1970s to highly centralized state controlled system in the 1980s, and to a serious lack of sound economic policy and inefficiencies of public institution of the present day.

After the fall of Taliban at the end of 2001 and the creation of an Afghan Interim Administration in December 2001, followed by the establishment of "The Islamic Transitional State of Afghanistan" in the July 2002, Islamic Republic of Afghanistan in October 2004 which was followed by parliamentary

⁸ Karez is an underground tonal, used for irrigation purpose.

election in October 2005, the scale of social and economic destruction in the country became more visible.

In response to the vast recovery and reconstruction needs, a large number of international organizations (UN agencies, World Bank, ADB, NGO's and donor organization) focused Afghanistan. After an international pledge at the Tokyo conference in January 2002, the government organized the need for reform and transformation of its institutions to facilitate effective and efficient response to the growing needs of Afghan communities. One of the first significant efforts was the creation and use of a National Development Framework (NDF) to set the country on the track to prosperity. The NDF outlined major national policies and strategic issues for the recovery and reconstruction of the socio-economic sector.

The NDF clearly articulated the division of responsibilities between the public and private sector. Provision of security, justice and equality, investment in human capital and social safety nets remains the responsibility of the state, while creating and enabling environment for the private sector to actively engage in production and marketing activities. The NDF prescribes the role of the government as regulator policy/strategy maker, monitor, evaluator and promoter of the people's entrepreneurial energies, while production and management of the economy is assigned to the private sector.

Specific targets have been set to measure performance. A 40% reduction in Ministry staffing is expected but at the same time 5 river basin management agencies should be fully operational by 2010. Irrigation improvement should reach 1 million hectares by 2010 and 2.2 million ha in another 5 years. By 2015 multipurpose water schemes should generate at least 180 MW of power productivity. Targets are also set for wheat and livestock. The area of orchards is projected to increase by over 70% from 80 thousand hectares in 2003 to 138 thousand hectares in 2015 (NDF).

In light of this document (NDF), several laws, policies, strategies and programs have been developed, among which the policy and strategy for the rehabilitation and development of agriculture and natural resource sector (approved on February 2004) and the MAI 5 years master plan (1385-1389), which was endorsed by the Afghanistan cabinet on January 2006, are worth mentioning.

In the case of forest protection, reforestation and range land management the strategic approach of the Ministry is to implement measures, which achieve the optimum balance between high capacity of agriculture / production on the one hand, and conservation and improvement of the resource base on the other. In this case the community based rangeland management and forestry approach will also support non-timber forest products (medicinal plants, herbs, mushrooms and fodder) that will generate additional income and may assist in involving the communities in effective management and enhance reforestation efforts. One of the task groups, responsible for the development of the master plan was the team specializing in natural resources management. This team identified land degradation as one of the key issues, which required substantial attention.

Forest protection, watershed management, control of desertification and range management are the major components of the Ministry of Agriculture and Irrigation (MAI) Master Plan, which provide clear guidance for natural resource sub-sector work during the next five years.

In March 2002 following the Tokyo ministerial meeting, a multi-donor mission visited Afghanistan to conduct an environmental needs assessment. Consulting with key stakeholders, the mission prepared a preliminary assessment report which constitutes an environment framework such as policy, institutional and donor coordination; and technical assistance for short and medium term implementation. This document will be used as an inception point for coordination of assistance to improve environment in Afghanistan.

The London Conference held on 31 January - 1 February 2006 provided an opportunity for Government of Afghanistan to present the Interim National Development Strategy which sets out its political and economic plans and priorities for the next five years. Thus, environment is under one of the three pillars “Economy and Social Development”. The Afghanistan Compact states “... in line with Afghanistan’s MDG, environmental regulatory frameworks and management services will be established for the protection of air and water quality, waste management and pollution control, and natural resource policies will be developed and implementation started at all levels of government as well as the community level”. This declaration gives importance to sustainable land management.

The “London Conference” brought together more than sixty countries to cover the expenditure required by the plan and assist the needy people of Afghanistan. The objective of the conference was; 1) to launch the Afghanistan Compact (AC) as a framework for donor involvement in Afghanistan for the next five years; 2) allow the government of Afghanistan to present its National Development Strategy (NDS) to the international communities; and 3) permit the government of Afghanistan to obtain international support for its (NDS) implementation.

The consequence of the last three decades of war on many forest and rangeland areas of Afghanistan can be characterized as follows:

- The total loss of the natural forests in the coming 30 years.
- Progressive decline in pasture quality and quantity.
- Irrigation water coming in damaging floods, which cannot be used by farmers.
- The depletion of wildlife habitats.
- The irreversible loss of top soil through erosion.

It becomes clear that an effective approach to the institutional problems lies not in trying to restore the previous Ministerial strategies and practices, but rather in defining a new policy and strategy, which will address the urgent natural resource problem. Therefore a policy and strategy for the forest and range management sub-sector have been developed and articulated as a vision for the long-term future.

The policy of the forestry and range management sub-sector is that the people and institutions throughout the country establish and maintain forest and rangeland covers and regimes of utilization which achieve a balance between, on the one hand, maximization of production and productivity in all agriculture land uses (dry land farming, irrigated farming, livestock husbandry, forest products, wildlife exploitation) and, on the other hand, effective maintenance and enhancement of the natural and wildlife resources bases.⁹

The strategies of the forestry and range management sub-sector express how the above policy will be put into effect. Therefore the strategies concerning regimes of the utilization cover the following three areas:

- The types of land use in forestry, range and wildlife management.
- The system for people and / or institutions to manage the forest, range and wildlife resource.
- The system for people and / or institutions to own and have rights to use the resources.

The policy and strategy for forest and range management sub-sector was completed on January 2005 and endorsed by the minister’s economic committee of the cabinet of Afghanistan. This policy and strategy recognizes the strategic role of communities and local authorities for the sustainable management of forest, rangeland and wildlife resources.

⁹ Policy and strategy for forest and Range Management Sub-Sector, July 2004

According to the policy of the Ministry of Agriculture and Irrigation (MAI) the management of water resources remains the responsibility of the government, which will control and manage this resource in a proper manner on behalf of the people of Afghanistan.

The government has designated the Ministry of Energy and Irrigation (MEI) to conserve, manage and develop water resources and the irrigation system.

After the induction of AIA (2002) followed by the (ITSA) & IROA, several important steps have been taken such as:

- 2002 National Development Framework, which is for an integrated approach with active participation of communities and private sector;
- February 2004, policy and strategy for the rehabilitation and development of agriculture and natural resources;
- August 2004, an urgent national conference on forest protection and development;
- January 2005, community forestry, rangeland policy and strategy;
- December 2005 Environmental Act approved by the cabinet.
- January 2006, the MAI 5 years master plan. This plan is also focussing on forest protection and reforestation, watershed, rangeland and wildlife management, combating desertification etc; and
- February 2006 MSP Proposal prepared - under process
- Forestry Management Act (Draft).
- Protected Areas Management Act (Draft).
- Rural Land Administration Project funded by DFID and the ADB, for community agreements about legitimate rights to pasture and agriculture land (June, 2006).

3.1 Afghanistan has signed the following international conventions

- International convention for the protection of the world cultural and natural heritage (WHC), 20 May 1979
- Convention on International Trade & Endangered Species of Wild Flora & Fauna (CITES), 28 January 1986
- United Nation Convention to Combat Desertification (UNCCD), 26 December 1996
- United Nations Convention on Biological Diversity (UNCBC), 18 December 2002
- The Montreal Protocol on Substances that deplete the Ozone Layer, 18 December 2002
- United Nations Framework Convention on Climate Change, 1992 (UNFCCC), 18 December 2002
- Vienna Convention for the Protection of the Ozone Layer (signed on 17 June 2004, no ratified)
- Basel Convention on the Control of Trans-boundary Movement of Hazardous Wastes & Their Disposal (signed on 22 March 1989, but not ratified)
- Convention of Migratory Species of Wild Animals (CMS)-(soon will be signed)
- Convention on Wetlands of International Importance (RAMSAR) -(soon will be signed)

3.2 Other Initiatives Undertaken in Afghanistan

- Capacity Building for Sustainable Land Management, MAI, UNDP-GEF, May 2005. Medium-Sized Project Proposal Prepared and Submitted to GEF
- Green Afghanistan Initiative (GAIN), UNT, June 2005

- Restoration, Protection and Sustainable Use of the Sistan Basin, PDF B Prepared & Endorsed by Government Related Institutions
- Afghanistan-Tajikistan Environment Coordination Protocol, 13-14 July 2006 Dushanbe Meeting
- Environmental Assessment of Oxus-River Basin initiated by UNDP Regional Office, Bratislava (Afghanistan & Tajikistan)

4. Institutional measures taken by national program, which could be used toward implementation of the UNCCD

4.1 Forest and Rangeland Administration of Afghanistan

Department of Forestry and Rangeland (DFR) which is responsible for the management, utilization, protection and regeneration of the country's natural forests, manmade forests, rangelands, national parks and wildlife resources, has 11 directorates in its headquarter in Kabul and a forestry office in each of the 34 provinces of Afghanistan. DFR has approximately 196 technical staff of various background and 1215 administrative and supporting staff all over the country. The staff is highly motivated, working under difficult condition, with very limited normal budget and possibilities.

The main institutional problems currently faced by the department of forestry and range management and its representatives at the provincial level stem from the previous policy of managing the natural forest resource itself. Involvement with people and communities has been negligible. The official emphasis has been on protecting the natural resource, denying access and use to people for the most part, and allowing access (for example for the collection of pistachio nuts) on a strictly controlled basis.

In the case of rangeland, the Department approach centered on the extension of various technical measures to increase the production of pastures, including rotational grazing and the sowing of improved pasture species. However there was no clear direction as to how herdsmen were to invest in such measure on rangelands which were public land and over which they little effective management control.

It has become clear that an effective approach to the institutional problems lies not in trying to restore the pervious department strategies and practices, but rather in defining a new community based policy and strategies which address the urgent natural resource problems.

Therefore a community based forestry policy and strategies have been prepared and according to that the following projects are proposed. The budget will be assisted by the international aid communities, which were undertaken in London conference held in January 2006. Table (4)

Table 4: Proposed and Ongoing Projects¹⁰

No	Name of the project	Budget (\$)
1	Poplar propagation project in Paghman, Gozargah and Demoradkhan Farms	632240
2	Establishment of a Green Belt around Kabul city	4466650
3	Plantation of the country highways	178042372
4	Plantation of the borders highways	8420468
5	Establishment of the pasture propagation center	39000
6	Project for combating desertification	5000000
7	Establishment of popular tree nurseries in 15 provinces of Afghanistan	95701457
8	Pistachio and pines forest protection, environmental conservation and creation job opportunities	1522100
9	Watershed management in Kunar, Laghman and Nangrahar province	865017
10	Biodiversity conservation	394000
Ongoing Projects		
1	Pistachio forest protection land rehabilitation in Badghis Province	1000000
2	Capacity Building (GAIN)	280000
3	Natural Resource Management (ADB)	1907000
Total		\$296.900.414

4.2 National Solidarity Program (NSP)

The National Solidarity Program (NSP) is a move toward a community approach in which the technical, organizational and decision making aspect of development are transferred in as large as measure and as efficiently as possible to the people (community) who can then manage them themselves, for their own benefit. The program is based on sustainable form of applicable self governance, rural reconstruction and poverty eradication. After three years, the main output and achievements of the program can be summarized in Tables 5-6;

Table 5: Main Output Indicators and Achievements as of 31st May 2006

Result Indicators	Total
No. of provinces	34
No. of districts	274
No. of Facilitating partners personal deployed	6,025
No. of Communities Mobilized	13,029
No. of community Development plans prepared	11,113
No. of community Development Council Elected	11,735
No. of sub-project proposals submitted	18,796
No. of Approved sub-project	18,480
No. of sub-project proposals completed	5,554
No. of Communities Contracted for NSP to Facilitating Partners	17,278

¹⁰ Plan of the Forest and Range Management Department 2006

Table 6: Main Output Indicators and Achievements of NSP by Sectors as of 31st May 2006

Sectors	Total No. of Sub-projects
Agriculture	13
Education	1,057
Emergency Response	10
Public building	21
Health	10
Irrigation	3,013

Under this program the establishment of 11,735 community development counsels, 274 district and 34 provincial councils is the most important asset for preparation of a National Action Plan to combat desertification.

4.3 Ministry of Energy and Water

Ministry of Energy and Water has to implement the following projects by its External Development Budget* as shown in Table 7. It's to be noted that these project are considered to have relevance to UNCCD

Table 7: Projects to be Implemented During the Next 5 years

Ministry of Energy and Water	AFG Bud REF	Sub Project Title	Donor	Expenditure Requirement 1385	Funding 1385
1- Fully Funded Project					
	AFG 0337201	The Salma dam Project- Feasibility Heart Province	IND	27,33	27,33
	AFG 0457401	Parwan Irrigation Project	CHN	5,00	5,00
	AFG 0679701	Rehabilitation of Amir Ghazi, Qargha Reservoir Dam	IND	2,05	2,05
	AFG 0679901	Adoption of 100 villages to promote integrated rural development through solar electrification and rain water harvesting.	IND	1,75	1,75
	AFG 0688201	Community based irrigation infrastructure and institutional strengthening of water resources and irrigation sub-sector in western region phase 2	GER	1,39	1,39
	AFG 0688601	Capacity building development for irrigation and water resources management	ADB	0,61	0,61
Category Total				38,12	38,12
2- Partially Funded Project					
	AFG 0336201	Development of river basin program in Kunduz/Bghlan/Bdakhshan and Takhar sub river Basin.	EC	5,64	4,91
	AFG 0336301	Feasibility study and detail design of water resources on irrigation project in 5 main river Basin	ADB	900	0,46
	AFG 0390001	Reform of the water sector	GER	1,09	0,96
Category Total				15,73	6,33
Ministry Total				53,85	44,46

5. Contribution of International Agencies with the Government of Afghanistan towards Sustainable Land Management

5.1 UNEP National Capacity Self-Assessment (NCSA) and National Adoption program of Action (NAPA) for Afghanistan

The government of Afghanistan and United Nations Environment Program (UNEP) signed two project documents, the National Capacity Self-Assessment (NCSA) and National Adoption Program of Action

(NAPA) in 2004. The objectives of the NAPA are to develop a program of action to adopt climate change through assessing vulnerability and identifying priority adaptation measure. The objective of NCSA is to assess Afghanistan's capacity needs to meet the obligation of the following three conventions:^{11, 12}

- Climate Change (UNFCCC).
- Biodiversity (UNCBD).
- Desertification (UNCCD).

Both projects are executed by the Afghanistan National Environmental Protection Agency (ANEPA) of Afghanistan with assistance from UNEP through its institution and capacity building program for environmental management in Afghanistan. This program is supported by the EC.

Over a four day period, the project team discussed objectives, activities and expected outputs of the two projects. As a result the whole task has been divided among four working groups: Biodiversity, Climate Change, Desertification and Cross-Cutting. The assessment processes for both NCSA and NAPA were divided into three major phases: Gaps and Vulnerability Assessment, Needs Assessment and Prioritization, Action Planning and Policy.

Each working Group is spearheaded by national lead agency (NLA) that will be responsible for the implementation of the tasks assigned to such working Group and coordination of inputs from Collaborating National Agencies (CNA).

The main out puts of each phases of the projects are:

- Report /library stocktaking of existing information on vulnerability of biodiversity to climate change and capacities to implement UNCBD, UNFCCC and UNCCD.
- Key adoption in capacity building measures (Categorized by region and sector).
- Draft NAPA/NSCA and project profiles for selected priorities.

5.2 UNEP Post-Conflict Environmental Assessment in Afghanistan

In 2003 the United Nations Environmental Program (UNEP) conducted a post-conflict environmental assessment in Afghanistan. The scope of UNEP's assessments has included pollution in the urban environment, surface and ground water resources, deforestation, air quality and desertification. The status of protected area is also investigated. The report of the conducted assessment has been published and used as a source.

This report presents specific finding concerning the natural resources of Afghanistan and recommendations how to improve environmental conditions in the country.

5.3 Sistan Basin Project

United Nation Environmental Program (UNEP) invited delegation from Afghanistan and Iran to technical meetings on the shared Sistan Basin to Geneva from 5-7 December 2005 and 15-18 May 2006.

The objectives of the meeting were:

¹¹ Toward Sustainable Land Management in Afghanistan January-2006

¹² NCSA and NAPA for Afghanistan. Inception Report, 2005

- To train participants in the application of Integrated Water Resource Management (IWRM) concept and tools.
- Seek a common understanding on the problems and issues facing the wet-lands.
- To support technical information exchange between the two countries.

The main problem in Sistan Basin is its extreme climatically condition, where the people endure hardship due to strong winds and sand storms for approximately 120 days per year. The Hamoun Wetland situated in Sistan once had a variety of vegetation, bird-and fish-life. Now due to the long period of drought there is very strong and clear decline of birds and vegetation cover in the Hamoun wetland. During the course of the meeting both delegation expressed their desire to cooperate with and assist to each other.

The following steps have been agreed on:

- Each country will designate a National Advisory Committee on the Restoration and Sustainable Development of the Sistan Region.
- A comprehensive survey of the Sistan Region (Hamoun Wetlands) will be conducted. The survey will address issues such as water flow, water use, wetland vegetation, fisheries and wildlife.
- In the course of the second meeting will be discussed progress since this meeting.
- UNEP will present a list of current and potentials stakeholders interested in the restoration of Hamoun Wetlands.

5.4 Land Degradation Project

The next project which has relevance to UNCCD is a land degradation project, funded by GEF and USAID and implemented by the MAI with the assistance from the United Nation Development Program (UNDP). The goal of the project is to address the desertification and land management issues. The project is initiated by building capacities of sustainable land management and development of National Action Plane (NAP) to combat desertification. This project will be linked with the UNEP-GEF assisted NCSA project. Information collected from the NCSA on capacity needs for desertification control will be used by this project to prepare priority activities for capacity development.

5.5 The National Risk and Vulnerability Assessment project (NRVA)

The National Risk and Vulnerability Assessment project (NRVA) is implemented by the assistance of WFP. The objective of this project is to identify patterns of food insecurity, poverty and vulnerability within communities in Afghanistan. The preparation of a database is currently being led by the Ministry of Rural Rehabilitation and Development (MRRD) and WFP with the collaboration from the Ministry of Public Health (MoPH), donors and NGO's.

5.6 Capacity Development for Sustainable Land Management Project

To overcome the severe danger of desertification, the Government of Afghanistan has been seeking international assistance. In response to the Afghanistan's Government request, the Deputy Minister of

MAI was appointed as the National Focal Point (NFP) for implementing initiatives of the United Nations Convention to Combat Desertification (UNCCD). The Ministry has also requested the UNDP to cooperate in fulfilling its obligation under the UNCCD. Subsequently it led the ministry to apply for a grant from the Global Environment Facility (GEF). The aim of the grant application to GEF was to fund the preparation of a Medium Size Proposal (MSP) for Capacity Development and Mainstreaming of Sustainable Land Management (SLM) according to commitments under the UNCCD and to support the Government articulation of the National Action Program (NAP) for (SLM).

The NAP will be cross cutting in nature and will link with sustainable rural livelihood, poverty reduction, mechanism and quality of life issues. The SLM MSP also aims to deliver capacity building and institution strengthening to support the policy, planning and implementation process for SLM by “mainstreaming” these themes across relevant ministries/agencies and national/provincial authorities. Based on the expected success of building capacity through the MSP, together with articulation of needs in the NAP, a Full Sized Project (FSP) will be developed as a second phase of the NAP program, from 2008 onward. The MSP will be based on:

- The relevant documents that have been collated including UNEP Post Conflict Environmental Assessment 2003.
- The outcome of the SLM seminar, held in October 2005.
- The work of the UNDP programming mission, who visited Kabul during November 2005.

UNEP’s Post Conflict Environmental Assessment indicates the current level of land degradation in Afghanistan and shows ways of sustainable land management.

A National Land Degradation Seminar was held on October 2005. The seminar has been attended by more than 70 stakeholders.

The recommendations of the National Land Degradation Seminar which resulted from the discussion can be summarized as follows:

- Articulate a strategy and action plan to address desertification.
- Develop a scientific research program for combating the soil erosion.
- Take measure for reversing desertification.
- Develop a national awareness and investment strategy for combating desertification.
- Identify and propagate resistant to drought native shrub and tree species.
- Identify and provide alternative energy instead wood as fuel material.
- Ban clear cutting of trees and shrubs and overgrazing.

The recommended Energy and Environmental Program (EEP) will be supported by UNDP over the next three years. The EEP has three pillars as follows:

- Mainstreaming environment into NDP.
- Land and Water Management.
- Sustainable Rural Energy Program.

It should be mentioned that donors are not currently supporting the project proposal, which will contribute to a comprehensive approach to SLM.

5.7 Protected Areas and wildlife Conservation system in Afghanistan.

ADB is assisting to protect biodiversity in selected protect areas of Afghanistan, while addressing the basic need of communities in the buffer zones.

The protected area component, financed from the Global Environment Facility (GEF) aims to conserve biodiversity in selected protected areas. It develops management plans, conduct biodiversity assessments, provide basic park infrastructure and develop ecotourism for the benefit of local stakeholders.¹³

The buffer zone component, financed from the DFID, aims to conduct participatory assessment of target communities to identify their needs and priorities for action. It is to be noted that works on conservation of natural ecosystems and wildlife resources in the protected areas of Band-E-Amir and Wakhan corridor has been recently initiated.

- Band-E-Amir is located in Yakawling District of Bamyan province. The area is known for its spectacular chain of six crystal blue lakes in the midst of desert and scrubland of the Hazarajat plateau. Close to the lakes about 4000 people live in seven villages.
- The Wakhan corridor is located in Badakhshan province, midst of the Hindu-kush, Karacorum and Pamir mountain ranges and fallow the Amu Darya (Oxus/Panj) river. The Wakhan corridor has been an area of special interest to the international agencies in the past for its scenic, biodiversity and tourism value. Wakhan is designated a wildlife reserve in 1978 to protect the Marco polo sheep and other large animals, including the Siberian ibex, snow leopard and brown bears.

The designated protected areas in Afghanistan are shown in Table 8.

Table 8: Designated protected areas in Afghanistan

Name	Area (ha)	Year of Nomination	Elevation (m)
Bande Amir National Park	41000	1973	2900-3832
Big Pamir (Wildlife Reserve)	67938	1978	3250-6103
Ajar valley (Wildlife Reserve)	40000	1978	2000-3800
Kole Hashmat Khan Waterfowl Sanctuary	191	1973	1792-1784
Dashte Nawar National Waterfowl Flamingo Sanctuary	7500	1977	3200-3210
Abe Estade National waterfowl Flamingo Sanctuary	27000	1977	1950-2100

The Technical Assistance (TA) has a steering committee, which comprises representative of ADB, Department of Forest and Rangeland (DFR), Ministry of Agriculture and Irrigation (MAI), Ministry of Information, Culture and Tourism (MICT), Afghan Tourist Organization (ATO), Ministry of Rural Rehabilitation and Development (MRRD), Ministry of Energy and Water (MEW), Local Governments and NGOs, working with a wide range of stakeholders.

ADB has also drafted strategies for a protected area system and ecotourism in Afghanistan. This document proposes a series of trial projects, aimed at finding conservation management and ecotourism development methods. The document is being circulated among national and international partners for its elaboration and endorsement.

¹³ ADB, Afghanistan Protected Areas Management October-2005

ADB launched a Technical Assistance (TA) project to develop community based policy and strategy for forestry and range management sub-sector. The report recognizes the strategic role of communities to have right to managed these resources for their own benefit.

ADB with cooperation of the (MoAI) has developed a land policy and its implementation in Afghanistan. The purpose of this document is to provide a set of priority land tenure and administration issues and some guidelines for their resolution to the satisfaction of the vast majority of the population.

5.8 FAO Support towards Sustainable Land Management

The Food and Agriculture Organization (FAO) of the United Nations Representative in Afghanistan supports the rehabilitation and development of the agriculture and natural resource sector and assists the country towards becoming food secure and self-reliant.¹⁴

FAO projects that are relevant to UNCCD could be noted as follows:

Beside other activities carried out in Afghanistan, FAO provided support to the MAI and the Metrological Department of the Ministry of Civil Aviation in establishing an agro-metrological service. The service includes 21 complete weather station, 88 rain gauges and 72 crop monitoring points to collect data on weather conditions for food security and agriculture analysis. A complete database and information system containing metrological records stored since 1942 was established. For the sustainable use of the agro- met service, some government, NGOs and national project staff have been trained. The agro-metrological network is now run directly by USAID. This is an early warning system, which is also used for food security programs.

- FAO completed community based rehabilitation work on canals throughout the country improving irrigation water delivery to an estimated 12000 farm families, FAO also assisted communities in Farah Province, which suffered from series of sand storm. All canals and karezes, were cleaned from sand and the affected hydraulic structure was rehabilitated.
- FAO in collaboration with Afghans authorities undertook an assessment of Afghanistan's forest resources and the capacity of its forestry sector, and identified priority actions for its rehabilitation. FAO is now continuing the capacity building of the forestry and rangeland department as well as developing appropriate legislation.

5.9 DFR and UNOPS/ACC Joint Project

Within a Memorandum of Understanding signed between UNOPS and MAI - Department of Forestry and Rangeland (DFR), UNOPS has worked together with DFR at the national and provincial levels to establish three Provincial Demonstration and Training Centers in Takhar, Herat and Ghazni. These centers provide a base from which government forestry and extension workers are able to undertake their activities. They include a nursery, modern and simple irrigation technology, picnic areas, greenhouses and a training /demonstration center.

The implementation of the provincial center in these provinces will both contribute to the sustainable management of renewable natural resources as well as support the development of rural people's livelihood across the three provinces. Additionally a strong gender focus will be given to project implementation, with women being key participants in the development of family and home nurseries.¹⁵

¹⁴ Report on FAO Activities in Afghanistan, June 2006

¹⁵ Progress Report-Reforestations and Natural Resources Rehabilitation in the Eastern region. April 2006

The specific objectives of this project are:

- To provide alternative sustainable livelihood through the creation of home and community based nurseries with technical assistance.
- To increase natural vegetation and forest cover through a community and government supported labor intensive approach and
- To improve technical and institutional capacity at community and government levels.

5.10 Forestry Department and ACC joint Project

The project for reforestation and natural resource rehabilitation extending into northwestern and eastern region (Laghman, Kunar and Noorestan provinces) is implemented by the Forestry Department and Afghan Conservation Corps (ACC), a labor-based natural resources rehabilitation project of Afghanistan. This project has activities that can be grouped into five broad categories, namely:

- Nursery Establishment.
- Park and Forest Rehabilitation.
- Soil and water conservation.
- Landscaping of public compounds.
- Environmental Education.

The project aims to rehabilitate natural resources in the northern Eastern region, contribute to the development of sustainable rural people's livelihood and generate employment.

5.11 Joint Project of the MAI and Wildlife Conservation Society ¹⁶

The projects themes are: wildlife, rangeland, livestock, forest, health and socioeconomic factors. This is one of the ongoing projects, which focuses:

- The Wakhan Corridor is one of the most famous wildlife habitats in Afghanistan
- The Hazarajat Plateau which has some of the most important protected areas in Afghanistan
- The Eastern Forest Complex which is one of the important components for both biodiversity conservation and economic development.

This project has to conduct the following four categories of activities

- (i) survey, baseline data collection and analysis, identify threats and design initiatives for their eradication,
- (ii) Environmental education, establishment of community resource committees.
- (iii) Establishment of a four-country Trans Boundary peace park in the Pamirs.
- (iv) Capacity building within Afghanistan environmental sector.

¹⁶ Reports of wildlife Conservation Society (WCS) 2006

5.12 Rangeland Component

In this regard the following activities are conducted.

- Undertaken the detailed rangeland assessment in Wakhan Corridor.
- Assess migratory patterns of Marco polo sheep and movements of local herders and communities.
- Determining areas important to people, wildlife, potential threats and opportunities for intervention.

5.13 Renewable National Resource Management /Green Afghanistan Initiative (GAIN) Project

The UNAMA AETA has approved a sum of US\$ 2066682 for the Green Afghanistan Initiative (GAIN) Agency to work with the Department of Forestry and Rangeland (DFR), the National Environmental Protection Agency (NEPA) and other relevant ministries towards the greening of the country.

The implementation of activities within the GAIN frame Work, at both the national and provincial levels is presently being undertaken by UN agencies (FAO, WFP, UNOPS, and UNEP). The long term objectives are to provide alternative sustainable livelihoods, through the creation of home and community based nurseries to increase vegetation throughout the country.

5.14 Building capacity to address land-related conflict vulnerability in Afghanistan

The purpose of the World Bank funded initiative is to build a capacity of the recently established Land Commission in communities to formulate policies and adopt practices that address land-related conflict invulnerability. The program will focus on the consecutive pieces of analytic work (land disputes and continuation of conflict; pilots in community adjudication and disputes resolution, lack of access to land and rural vulnerability) to economic crises which will serve to inform subsequent policy dialogue regarding the development of local strategies for the prevention mitigation of land related disputes and rural vulnerability.

Output: a final report consisting of one document will be the main output of the proposed activities. The report will address (a) land dispute and the continuation of armed conflict and the feasibility for local level dispute resolution mechanism for settling land disputes; (b) the outcome of the pilots to test approaches appropriate for land-dispute resolution and; (c) limited access to land and rural poverty, highlighting the links between conflict, vulnerability and land in Afghanistan.

6. Review of benchmarks and Indicators utilized to carry out environmental impact assessment

In the past there was not any formal and special national environmental monitoring and evaluation system. Recently an environmental act has been endorsed. The National Environmental Protection Agencies (NEPA) has been newly created with its own monitoring and evaluation units, which will monitor and evaluate projects of natural resource development, environment and agriculture through a system of quarterly and annual reports.

7. Conclusions

A combination of human activities and bad state of climate has caused increasing desertification in many parts of Afghanistan. The main problems that Afghanistan faces today are those of soil erosion, overgrazing and deforestation. All of these contribute to a decline in the numbers of wild life and the destruction of fragile eco-systems.

On a land that is already damaged, specific efforts should be made to reforest and improve natural rangeland. Protection of natural plant cover and prevention of over grazing is also of great importance.

Using the community participatory approach, saline soils in the north, west, and south west could be turned in to suitable crop land for improvement of livelihood in the rural communities.

Sand dunes movement could be prevented by plantation of different species of *Holoxilon*, which are native and adoptable to the degraded sand soils of the north and south west part of the country.

The banks of river especially the banks of Amu Darya should be stabilized to protect land and infrastructure from the river flooding torrent.

It would be of great important to create system for national parks, protected areas and wild life conservation.

To combat desertification a national action plane should be developed and put into implementation.

To initiate and conduct all these activities, first of all a series of laws, regulation and strategies have to be adopted.

The awareness of the people has to be raised through a national and local media on the importance of the sound environment and its protection and improvement.

The people of Afghanistan are in need of help to restore their natural habitats. The international community is committed to lend them a helping hand in order to rehabilitate their highly damaged eco-system.

8. Recommendations

To combat desertification the following effective (multi actor) approach are recommended:

- Preparation national program concerning desertification and its prevention.
- Creation of a policy/strategy framework such as legal system for allocation of user rights over forests and rangeland to communities.
- Attraction of international donor assistance for sustainable land management.
- Create a suitable mechanism among the relevant government and non-government organizations to implement Afghanistan's obligation under the convention of combat desertification.
- Establishment of an information system to monitor and help implement programs which address desertification and land degradation issues.
- Establish community base organization for the planning and decision making concerning local strategy for combating desertification.
- Developing the capacity of the government and communities through exchange of expertise.
- Provide of support and funding for the implementation of program and project.

* MEW project Implemented by its External Development budget – Kabul 2005