

# TAJIKISTAN: ISSUES AND APPROACHES TO COMBAT DESERTIFICATION

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# CURRENCY EQUIVALENTS

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# **ABBREVIATIONS**

ADB	_	Asian Development Bank
ADF	_	Asian Development Bank
ADTA	_	Advisory technical assistance
CAMIN	_	Central Asian Mountain Information Network
CARs	_	Central Asian Republics
CATBP	_	Central Asia Transboundary Biodiversity Project
CCA	_	Common Country Assessment
CDF	_	Comprehensive Development Framework
CIS	_	Commonwealth of Independent States
CPI	_	Consumer Price Index
CSAC	_	Consolidation Structural Adjustment Credit
CSP	_	Country Strategy and Program
CTAC	_	Consolidation Technical Assistance Credit
Dekhan	_	Private farmer
DMC		Developing Member Country of the Asian Development Bank
EBRD	_	European Bank of Reconstruction and Development
ESCAP	_	Economic and Social Commission for Asia and the Pacific
EU		European Union
FIAS	—	Foreign Investment Advisory Service
FSU	—	Former Soviet Union
GBAO	_	
	_	Gorno-Badakhshan Autonomous Oblast
GDP	_	Gross Domestic Product
GEF	_	Global Environment Facility
GM	—	Global Mechanism of the UNCCD
GSAC	_	Governance Technical Assistance Credit
GWP	—	Global Water Partnership
HIPC	—	Highly Indebted Poor Countries
ICAS	_	Interstate Council for the Aral Sea (merged into IFAS)
ICIMOD	_	International Center for Integrated Mountain Development
ICSD	_	Interstate Commission for Sustainable Development
ICWC	_	Interstate Commission for Water Coordination
IOS	_	Interim Operational Strategy
IPF	_	indicative planning figure
IDA	_	International Development Association
IFC	_	International Finance Corporation
IFAS	_	International Fund for Saving the Aral Sea
IMF	_	International Monetary Fund
MEAs	_	multilateral environmental agreements
MOE	_	maximum permissible concentration
MOU	_	memorandum of understanding
NAP	_	National Action Program -UNCCD
NFP	_	National Focal Point

NFP – National Focal Point

		Nutional Factor managed Action Disc
NEAP	_	National Environmental Action Plan
NGO	_	non-governmental organization
NSPR	_	National Strategy for Poverty Reduction
Oblast	_	largest jurisdiction below republican level (province)
ODS	—	ozone-depleting substances
PIP	_	Public Investment Plan
POP	_	persistent organic pollutant
PRC	_	People's Republic of China
PREGA	—	Promotion of Renewable Energy, Energy Efficiency and
		Greenhouse Gas Abatement Projects (an ADB RETA)
PRGF	_	Poverty Reduction and Growth Facility
PRSP	_	Poverty Reduction Strategy Paper
PPTA	_	Project Preparation Technical Assistance
RETA	_	regional technical assistance
Raion	_	jurisdiction below Oblast level (district)
RAP	_	Regional Action Program under UNCCD
REAP	_	Regional Environmental Action Plan
REC	_	Regional Environment Center
RRS	_	Regions under Republican Subordination
REPM	_	Register of Emissions and Pollutant Movement
RETA	_	Regional Technical Assistance
SDP	_	Sheep Development Project
SME	_	Small and Medium Enterprises
SIC	_	Scientific Information Center
SPA	_	Strategic Partnership Agreement
SPF	_	Social Protection Fund
SRAP	_	Sub-regional Action Program under UNCCD
ТА	_	Technical Assistance
TACIS	_	Technical Assistance for the Commonwealth of Independent States
TJK	_	Tajikistan
TLSS	_	Tajikistan Living Standards Survey
UNCCD	_	UN Convention to Combat Desertification and Drought
UNDP	_	United Nations Development Program
UNEP	_	United Nations Environment Program
USAID	_	United States Agency for International Development
WB	_	World Bank

# TAJIKISTAN: ISSUES AND APPROCHES TO COMBAT DESERTIFICATION (IACD-TJK)

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#### COMBATING DESERTIFICATION IN CENTRAL ASIA

#### TAJIKISTAN: ISSUES AND APPROACHES TO COMBAT DESERTIFICATION (IACD-TJK)

#### **EXECUTIVE SUMMARY**

1. The Asian Development Bank (ADB), with co-financing from the Global Mechanism (GM) of the United Nations Convention to Combat Desertification (UNCCD), approved the Regional Technical Assistance (RETA) No. 5941<sup>1</sup> to provide technical assistance to facilitate the implementation of the National Action Programs (NAPs) to combat desertification. The activities and outcomes of the RETA in Central Asia are expected to enhance the operations of a growing strategic partnership of donors interested in working together with the CARs to strengthen implementation of the UNCCD in the region. The *Tajikistan: Issues and Approaches to Combat Desertification* paper (IACD) has been prepared according to the conclusions reached at the working meeting of the National Focal Points (NFPs), the domestic consultant, the international consultant and representatives of the GM and UN Convention to Combat Desertification and Drought (UNCCD) Secretariat, held in Tashkent on October 28-31, 2002.<sup>2</sup> The IACD takes into account the country situation paper (CSP) prepared by the domestic consultant for Tajikistan, Prof. Khukmatullo M. Akhmadov, and a large number of other background documents.

2. The report focuses on the: (i) macroeconomic and poverty context; (ii) land degradation/desertification situation; (iii) implementation of the UNCCD; (iv) policy framework; (v) priorities and programs to combat desertification/land degradation; and (vi) issues and opportunities in implementing UNCCD/NAPs in Tajikistan

Macroeconomic and poverty context. The Republic of Tajikistan is located in the Pamir 3. Mountains of eastern Central Asia. Tajkistan faces a serious challenge to make an orderly transition from a chaotic post-conflict situation to a coherent path of economic rehabilitation and growth due to uneven economic management, weak institutional capacity and sporadic reform efforts. Even before the collapse of the Soviet Union and despite the large annual budget transfers from Moscow, Tajikistan was one of the poorest areas in Central Asia. Two thirds of the population is unable to meet their basic needs, and per capita income was only US\$ 330 in 1997. The main resource endowments, upon which Tajikistan's growth prospects are dependent, comprise cotton, aluminum, and hydropower, with cotton and aluminum the main foreign exchange earners. Based on the government's official poverty line criterion, 83 percent of the population is poor, and one-third is classified as "very poor". Poverty, however, is primarily due to limited employment opportunities and low wages, particularly in the agricultural sector. The old mechanisms of the system to absorb labor do not work any more and the new market mechanisms are still too weak to create many new jobs.<sup>3</sup> Poverty also involves decreasing access to such basic public services as education,<sup>4</sup> health care, and safe drinking water supply. There also exists a big divergence in poverty between urban and rural areas. The Government completed an Interim Poverty Reduction Strategy Paper (I-PRSP) in October 2000, and adopted a full PRSP in June 2002. The principal objective of the poverty

<sup>&</sup>lt;sup>1</sup> The TA grant was approved in September 2000, with a total cost of \$450, 000 to be jointly financed by the ADB (\$250,000) and GM (\$200,000). CARs covered by this consultancy contract, four other DMCs, namely the Peoples' Republic of China, India, Mongolia and Pakistan. The International Consultant was recruited in July 2001 (Contract # COCS/016.615). The plan of work, as set out in the approved Inception Report, provides for three person months for the International Consultant.

 $<sup>^{2}</sup>$  The meeting reviewed the interim outputs of the RETA by the domestic consultants and the international consultant.

<sup>&</sup>lt;sup>3</sup> Tajikistan PRSP.

<sup>&</sup>lt;sup>4</sup> The findings of the TLSS suggest that people without education are twice as likely to live in the poorest households than those with higher education (according to the PRSP).

reduction strategy is to increase real incomes in the country, achieve a fair distribution of the benefits of growth and, in particular, ensure a rise in living standards of the poorest groups of the population.

4. **Land degradation/desertification.** According to the Tajik NAP, currently 97.7% of the country's agricultural lands are suffering from erosion, as compared to 68% in 1973. The erosive processes have been especially active in the foothill regions. The two main factors underlying the process of soils degradation in Tajikistan are water erosion and gully erosion. Human economic activity plays a significant role in accentuating the erosive processes through intensive development of agriculture on sloping lands and associated unsustainable cultural practices. Intensive agricultural activity on steep slopes inevitably results in erosion. Soils are washed out, and the growth of ravines tends to decrease the area of arable soils. Even in the flat lands of Fergana, Gissara, Vahasha and Kabodina, a large amount of farming soils are scattered over the hills, small ravines, and dales. For example, the hilly parts of cotton fields suffer from under watering, while in those places where there are depressions, crops suffer from an oversupply of water. Both negatively affect the productivity of cotton fields. Under rainfed agriculture, slopes of up to  $25^0$  are widely used now, ignoring observance of organizational and agrotechnical antierosion measures. All pasturable lands of Tajikistan are strongly subject to erosion—with 89% of the summer pastures and 97% of winter pastures suffering from medium to strong erosion.

5. Lately one of the most powerful anthropogenic factors affecting desertification is the felling of mountain forests, bushes and half-bushes which are often of a unique type and provide important watershed protection services. The illegal and unplanned cutting of forests for fuel is of wide scale, especially on the forest lands of collective and state farms, while reforestation, replanting and others amelioration measures are weak or non-existent.

6. There is no comprehensive study to estimate the economic costs of land degradation in the country. The closest approximation comes from some evidence of decline in agricultural productivity. The Tajik NASAP<sup>5</sup> estimates that the decrease in production of only four agricultural enterprises has caused an annual loss of 281 billions rubles (US\$ 224 million) to the country's economy. The annual production of major agricultural products is estimated to have decreased due to land degradation by as much as 50 to 60 percent. There is a close nexus between land degradation and poverty. Poor people are highly dependent on natural resources for their livelihood and are most affected by environmental degradation, contamination of water sources and outcome of natural disasters including droughts and floods.<sup>6</sup> It is therefore important that policy makers involved in the PRSP process duly factor in the economic impact of land degradation in macro-economic and sectoral strategies.

#### Implementation of the UNCCD

7. **The National Action Programme (NAP).** The National Action Program (NAP) for UNCCD implementation was approved by the second National Forum in 2000 and received formal government approval through a Government of the Tajikistan Republic Decision in December 2001.<sup>7</sup> The focal institution for UNCCD implementation in Tajikistan is the Committee on the Land Resources and Land Management (CLRLM). Mr. Davlatsho K. Gulmahmadov, Chairman (Deputy Minister), is the National Focal Point of UNCCD. It may be noted here that in Central Asia, the Tajik NFP-CCD is the highest-ranking official (Deputy Minister) to have been placed in charge of coordinating the implementation of the UNCCD. He has also been associated with the NAP process since 1997 when Tajikistan officially joined the Convention.

<sup>&</sup>lt;sup>5</sup> Report of the Tajik CAMIN Working Group on "National Strategy and Action Plan for Sustainable Mountain Area Development of Tajikistan (NASAP).

<sup>&</sup>lt;sup>6</sup> Tajikistan PRSP

<sup>&</sup>lt;sup>7</sup> An English translation of the NAP was prepared and printed with assistance from the UNDP.

8. The NAP is a well structured document, which sets out a wealth of data on the country's natural conditions and resources, social and desertification conditions, processes of desertification, pollution, natural disasters, and deterioration of lands in the context of post-conflict situation. It also deals with the ecological, economic and social consequences of desertification and an associated 'strategy of actions'. In particular, the NAP emphasizes the need for an integrated information management and monitoring system.<sup>8</sup>

9. **Strengthening NAP process.** It may also be noted that while the NAP is a useful source document for UNCCD implementation, it is important that the land degradation concerns and strategy and programs to address them are appropriately mainstreamed in the PRSP framework. For this purpose, the office of the NFP needs to be institutionalized and strengthened to enable him to function effectively. In this context action is needed on the following two proposals. *First*, there is need to give serious consideration to the proposal to establish an Information Center on Desertification Control as an operational arm of the NFP and the CCD focal institution. This center is necessary, as the current data concerning desertification and its control are scattered amongst several scientific and project organizations, and needs to be pulled together so that it can support policy and program implementation dimensions of the NAP-CCD. *Second*, the interagency coordination mechanism with participation of all the concerned agencies (CLRLM, Nature Protection, Agriculture, Water Resources, Finance) also needs to be formalized and activated. *It is suggested that the Government takes necessary decisions to strengthen the institutional framework responsible for implementation of the CCD*.

10. The NAP also recognizes the need for strengthening participatory approaches to its implementation. There are more than thirty environmentally-oriented NGOs in Tajikistan, some 25 of which are members of the Tajik Public Ecological Council. Women's NGOs have special interest in the problems of environment and health. However, it is fair to say that the bulk of the NGOs are professional groups or associations, and there are not many NGOs working at the grassroots level with rural communities. The NAP process needs to look beyond the current emphasis on awareness building activities to promoting community-based organizations active in developing local initiatives to combat land degradation. In the present state of public administration structures, the NGOs can play an important role in extending the outreach of the NAP activities to the local communities. However, the NGOs themselves would need considerable training to perform this role.

11. **Capacity building support** is urgently needed to strengthen the the NFP and Focal Institution. However, weak management capacity is an endemic problem facing the entire public administration system and is being addressed by the Government as set out in the PRSP. However, more targeted capacity building support for improving the implementation of the UNCCD is needed in the following areas:

- Program development, such as preparation of concept notes and project proposals relating to addressing land and water degradation in order to approach potential donor agencies, including GEF.
- Communication skills, translation and interpretation in order to encourage active interface with international and bilateral agencies and their sensitization as to the importance of the Desertification Convention to the country's goals of sustainable economic growth and poverty reduction.

<sup>&</sup>lt;sup>8</sup> The largely conceptual discussion on this subject should be of broader general interest to experts involved with monitoring and evaluation systems relating to land degradation, and it could form a useful basis for development of an associated technical assistance project in Tajikistan.

- Sensitization training in cross-cutting concerns such as participatory approaches, gender issues, and sustainable development.
- Selective training in donor agency procedures, with particular emphasis on the partner agencies in the GM/ADB strategic framework agreement, and GEF.<sup>9</sup>

12. **Promoting a three-pronged approach to implementation of UNCCD**. The NAP process must look beyond the narrow current focus on the technical and scientific dimension of desertification to a cross-sectoral approach to understanding and tackling the underlying root causes of these problems. The implementation process should also exploit synergies with other multilateral environmental agreements (especially the Rio Conventions) and the NEAP. Thus, the focus of NAP implementation should be on a three-pronged approach:

- Mainstreaming with the CDF, NSPR, NEAP and Land and Forest Management Plans, and Strategy and Action Plan for Development of Mountain Territories.
- Participation of Civil Society organizations, such as NGOs, CBOs and rural communities.
- Operational Orientation to the Implementation Process through focus on pilot projects and cross-sectoral investment projects of concerned agencies.

#### **Policy Framework**

Macro Policy Agenda. The Tajikistan Government strategy as laid down in its PRSP is to 13. "create the conditions for accelerated and socially fair economic growth, essential for increasing incomes and raising living standards". The economy is projected to grow at an annual rate of around 6% over the next few years. A significant source of growth would be the rise in agricultural productivity associated with the breakup of the large state and cooperative farms into family farms, which is expected to continue as the ongoing process of land reform gathers pace. The creation of small and medium private enterprises, including growing activity in the informal sector, is also expected to become a major source of jobs and output. To stimulate the latter, the Government will take measures to create a competitive banking sector, facilitate the mobilization of savings and increase credit opportunities. Macroeconomic management will aim at establishing a stable economic environment through appropriate fiscal, monetary and exchange rate policies. Within the context set by the globalization process, the Government will encourage exportoriented growth to help solve the problems of external debt and benefit from the country's comparative advantages. Growth will be achieved through creating of favorable environment for the private sector investments and operations to be supported by effective public service delivery and public investments. Two elements of the macro policy require particular mention: (a) public debt management, and (b) public administration reforms.

(a) Public debt management. The total cumulative public debt amounted to 129% of GDP at the end of 2000.<sup>10</sup> Part of the arrears relates to the restructured concessional bilateral debts and long-term loans extended by international financial organizations. As part of its debt management policy, the Government intends "to seek with our major creditors as

<sup>&</sup>lt;sup>9</sup> With the recent amendment to the GEF Instrument, GEF has designated "land degradation, primarily desertification and deforestation", as a GEF focal area, as a means of enhancing GEF support for the successful implementation of the UN Convention to Combat Desertification.

<sup>&</sup>lt;sup>10</sup> The ratio of the present value of the debt to government revenues exceeded 400% by the end of 2000, well above the modified HIPC threshold of 250%. In spite of a number of debt restructuring agreements with the main official creditors during 1996-2001, the debt service burden remains high. This will put economic development of the country at risk and limits possibilities for poverty reduction interventions. Source: Tajikistan PRSP.

well as additional financing on concession terms". The Government will establish a policy regarding the level, terms and purpose of attracting external loans and economic criteria will be applied in selection of projects for the public investment program. Government borrowing on non-concessional terms will be prohibited.

(b) Public administration reforms. Reform of public institutions covers a wide range of actions. Measures aimed at improving the functioning of the executive branch of the state and in particular, as a priority, in sectors of immediate relevance to the welfare of the poor, i.e. the social sectors, agriculture and agencies responsible for development of private sector activity. Implementation of public management reforms envisages a complex of measures providing all together for the effectiveness and productivity of the public system. These include (i) a clear definition of the role and responsibilities of ministries and agencies, avoiding duplication of functions, and development of an organizational structure and staffing in line with their objectives; (ii) strengthening of financial control over the use of public resources; (c) establishing a professional civil service; and (iii) promoting transparency of operations of public bodies.

14. Poverty Reduction Strategy. The Government has identified four main elements that together constitute its strategy towards reducing poverty. They are: (i) encouragement of an accelerated, socially fair and labor-intensive economic growth with emphasis on export; (ii) efficient and fair provision of basic social services; (iii) targeted support to the poorest groups of the population; and (iv) efficient governance and improvement in security. The Government's efforts to encourage private sector activity to create jobs and increase income are a central part of its anti-poverty program. They will focus on the proper functioning of markets by (a) establishing a legal and regulatory framework related to establishment and development of enterprises and work places; (b) privatization of state enterprises. giving priority to those especially in agriculture; and (c) assisting the development of financial markets. The other main plank of the strategy directed at the poor relates to social protection. Social sector expenditures in the following three years will comprise of two components. The first component consists of basic expenditures on healthcare, education, pensions and the revised system of cash compensations. The second component consists of special allocations for poverty reduction programs. The PRSP further emphasizes that an important condition for poverty reduction is efficient use of, and access of the poor to, the key resources, in particular land and water It is recommended that the NFP-CCD and the Ministry of Nature Protection collaborate to ensure that the environmental concerns get reflected in the PRSP policy matrix and are highlighted as important issue areas for support at the level of policies and programs.

15. **Legal Framework.** Tajikistan has adopted a number of laws and resolutions to protect the environment. The main limitations of the legislation, as in the other CARs are: serious inconsistencies in legislation; weak administrative capacity to implement the law; and considerable scope for bureaucratic discretion in application of laws and regulations. The Judiciary system faces problems because much of the legislation was not designed to apply to a market economy. Also, the legislation dealing with property rights and contracts is unclear and contradictory. Taken together, these weaknesses hinder the process of economic reform. The Tajikistan PRSP emphasizes the need for institutional and legislative reforms. Restructuring state administration and improving the delivery of public services will necessitate institutional reforms. The legal system will be reformed to improve transparency and reduce possibilities of subjective decisions, and the reforms should extend to environmental legislation and regulations.

16. **Natural Resource Management and Environmental Policies.** The most significant environmental problems in Tajikistan are: land degradation; deforestation; deterioration of protected areas and wildlife; limited availability of clean drinking water; irrigation salinity; erosion; and natural disasters. Policy makers need to recognize that improved environmental conditions and better environmental management are a fundamental requisite for achieving long-term and sustainable economic growth. In

Tajikistan, the environmental legislation is basic, and resolutions, which do not carry the same weight as laws, are the most common tools to enforce environmental conditions and requirements. It is necessary to identify basic weaknesses in the policy, legislative and institutional frameworks to promote environmentally friendly natural resource use. The Government has started implementing the National Environmental Program for 1998 – 2008 aimed at ensuring rational use of natural resources. However, the country lacks specialized and appropriately equipped services to study, forecast, provide zoning and monitoring of detrimental impact of potential sources of natural disasters for the purposes of developing and undertaking preventive measures.

17. **Agricultural Policies.** The agricultural sector is characterized by two features, which aggravate poverty among the rural population: (i) incomplete land reform, which does not allow effective use of the land and agricultural production opportunities; and (ii) weaknesses in the current management and operating system of major agricultural subsectors, especially cotton production. A serious problem, however, relates to land use rights. The registration system lacks comprehensive coverage of land information and legal interests. A further problem is the limited access to internal markets in because of informal barriers and high transaction costs. In the case of cotton, there is lack of competition, interference by the government, delays in payments and unjustified under-pricing for raw cotton relative to international prices. As a result of the restructuring of collective farms into dehkan associations, farming decisions have undergone some positive change. However, de facto, farm management decisions, in particular, regarding the pattern of areas to be cultivated and the assortment of crops are still taken solely by certain managers and authorities. Some official interference in the process of pricing, procurement and marketing still remains. Infrastructure to serve the farms, i.e. supply cooperatives, trade and procurement organizations, companies providing with small machinery and transportation services, has not been set up. Notwithstanding these issues, the PRSP states that by early 2001 land entitlements for 50% of arable lands had been transferred to private farmers. While arable land is scarce, experience in recent years, based on the ongoing restructuring of the large state owned and cooperative farms, has shown that the transition to private farms can substantially raise yields. Agricultural reforms require acceleration of restructuring in agriculture, transfer of state agricultural assets into private hands, and encouragement of initiatives and investments in rural infrastructure.

18. Water Conservation Policies. Tajikistan is rich in water resources. Given an arid climate, the key condition for the development of agriculture in Tajikistan is pump irrigation. According to the Scientific Research Institute under the Ministry of Agriculture, 60 percent of the irrigated territory in 1996 suffered from water erosion. Erosion-control measures on irrigated lands were put on hold for want of funds. The main problems associated with irrigation are, on the supply side, caused by: (i) low river levels; (ii) silting-up of the main and distributary canal sections, thus reducing the useable discharge; and (iii) excessive seepage losses from canals through cracked or broken linings. On the demand side, water shortages can be created in the downstream areas of the system because of heavy withdrawals at the head through users taking more than their share. Water logging causes secondary salinity. Because water charges are not related to volumes used, and are in any case only partially collected, there is scant incentive to pay due regard to water use economy.<sup>11</sup> According to the PRSP, due to the poor state of the irrigation and drainage system, which has virtually not been maintained for the past 10 years, 16,400 ha of arable land (2.3% of its total area) dropped from the agricultural turnover, 83.3 thousand ha (11.6%) is in the degraded condition. *The challenge for policy makers is how to move simultaneously on: (i)* 

<sup>&</sup>lt;sup>11</sup> With the transition of the country to a market system, a fee was introduced, starting in 1996, for water supply to consumers. However, water-using farms are able to cover only a small part of the maintenance costs. The resulting deterioration of the water supply and irrigation complex reduced the efficiency of the system and considerably affected the condition of the irrigated land and the flooding of pastures. The main concern is the state of pumping stations covering almost 300 thousand hectares or 40% of the irrigated land. Source: Tajikistan PRSP.

*implementing reconstruction of irrigation and collector-drainage networks; (ii) improving lift irrigation technology and watering techniques; and (iii) improving water use efficiency.* 

19. Evolving a cohesive strategic framework to combat hnd degradation. Tajikistan has undertaken the process of evolving a cohesive strategic framework for economic growth and poverty production. However, the issues of land degradation and their impact on declining agricultural productivity and unemployment and poverty need to be more explicitly reflected in the implementation of PRSP. It is important that the NFP-CCD collaborates with the policy-making organs involved in the PRSP follow up process to ensure that land degradation issues are fully and explicitly reflected in the agricultural and irrigation sectoral policies and programs.

#### Priorities and programs to combat land degradation

20. **Priorities of the Government to combat land degradation.** The NAP is focused largely on technical issues relating to gaining a better understanding of the dynamics of desertification processes and natural or anthropogenic factors. However, the NAP is relatively weak in dealing with the broader developmental dimensions of combating desertification/land degradation. The UNCCD objectives emphasize a more cross-cutting and mainstreamed approach to combating desertification. The approach seeks to make efforts to control land degradation as an integral part of and the poverty reduction strategies and priorities. The NAP does not provide any specific project or program ideas either for technical assistance or investment support. However, the main priority areas, apart from a need for comprehensive information management and monitoring, may comprise projects that seek to tackle: (i) water erosion as a result of irrigation, salinization, and water-logging; (ii) overgrazing of pastures, and development of animal fodder and feed; (iii) felling of forests for fuel; and (iv) intensive cultivation on steep slopes in rainfed areas. The emphasis should be on identifying pilot projects with a participatory mode of implementation.

21. **Factors constraining the implementation of UNCCD in Tajikistan.** The main constraints are common to all the Central Asian Countries. These may be summarized as follows:

- The NAP is thin on policy and program content, with little attention to investment needs in sectors such as agriculture, irrigation or drainage, or land reclamation.
- Reliance on "stand alone" projects or activities aimed at combating desertification, rather than incorporating these activities as components of cross-sectoral programs of ministries, such as Agriculture, Livestock, Water Resources or Forestry.
- Issues such as soil erosion, salinization, water logging, wind erosion, or loss of vegetative cover need more comprehensive and cross-cutting approach requiring involvement of a number of agencies. Most agencies, however, work as enclaves concerned with their own mandates and budgets. This causes different ministries to work in isolation and at times at cross purposes.

22. At an operational level, the approach to tackle these constraints may involve actions somewhat along the following lines:

- There appears to be an urgent need to strengthen capacity in the concerned agencies to prepare project concepts and develop them into more detailed project documents. Also the Focal Institution and other concerned agencies need to develop translation facilities from Russian so that project proposals can be submitted in English to interested donor agencies for their consideration.
- The Focal Institution and the NFP should also be in a position to leverage other agencies' programs to address land degradation concerns by providing them with substantive advice or concrete written proposals to incorporate in the project design. This would be particularly relevant in order to influence the programs/projects in the pipelines of IFIs, which are in an early design stage.

23. Accessing External Assistance. Tajikistan is heavily dependent on external development assistance to sustain its policy reforms as well as to meet the real sector investment needs. However, it faces three main constraints in mobilizing resources: (i) the country has accumulated a large stock of external debt, amounting to 129 percent of GDP at the end of 2000; (ii) the country's absorptive capacity is limited because of persistent weaknesses in its institutional structures; and (iii) government agencies need considerable capacity development for identification and preparation of projects and programs to access external assistance. The bulk of this assistance is required on grant or quasi-grant terms. Strict selection criteria are required for inclusion of projects into the government's public investment program (PIP) in view of tight fiscal and budgetary discipline that is crucial to maintaining macro-economic stability and sustainable external debt-management (as mandated by the International Monetary Fund). The Government has recently set up an Aid Coordination Unit (ACU) within the Executive office of the President in order to address the situation in this area and responsible for management, coordination and monitoring of the use of external aid.

24. In the above external aid environment, the CCD Focal Institution, in collaboration with other concerned agencies, would need to make a strong case to the ACU for considering its proposals for adequate provision of budgetary resources and requesting external assistance from interested donor agencies within the framework of the overall PRSP-based aid program. For this purpose, the NFP needs technical assistance support to strengthen its interface with donor agencies and to prepare project concepts tailored to the priorities and processes of various potential donor agencies in order to access financing for UNCCD/NAP implementation. The development partners also need to give a stronger and more direct emphasis to addressing land degradation issues as part of their support to poverty reduction objectives. Both the Government and the development partners have obligations under the Convention (UNCCD) to assist with appropriate resources for effective implementation of CCD/NAP.

25. It is important to realize that the Focal Institution needs to have a credible program of projects, including pilot projects, to combat land degradation. Such a program, both for technical assistance and investment projects, must be mainstreamed into domestic budgetary and PIP processes, must be consistent with the PRSP framework, and should have necessary internal Government clearances. Preferably and to the extent possible, some budgetary resources should be made available to meet a part of the local costs, as this would convey an indication of Government's commitment and ownership of the projects and activities for which external financing is being sought.

26. According to the Government's PRSP, the total financing needs for the implementation of the PRSP action program has been projected at US\$ 688 million, of which domestic resources would provide for \$ 146 million and external financing would be needed to the amount of \$ 542 million. The current external aid commitments are estimated at \$ 371 million, leaving need for additional external resources of \$ 171 million. The time frame for this projection was 2002-2004, but more realistically it would be stretched to cover a longer medium term. The financing of the Tajik CCD-NAP associated projects and activities will have to be found within the have overall framework and possibly adjusted against the sectors, such as agriculture, environment and multi-sector social services over a 5-year time frame.

27. **GEF's designation of land degradation as a focal area** A new window of financing opportunity has opened with the expected amendment to the Instrument "to designate land degradation, primarily desertification and deforestation, as a focal area, as a means of enhancing GEF support for the successful implementation of the UN Convention to Combat Desertification." In order to avail of this opportunity, however, the NFP would need to work with other ministries or agencies to identify and build a pipeline of projects which may qualify for GEF financing. This basically implies projects which also address global environmental issues and include cofinancing from domestic and/or external sources in addition to GEF financing. In this context, GEF draft OP-15 "on Land Management", which was

considered by the recent GEF Council session in May 2003, emphasizes that in order to exploit synergies between the CCD and other focal areas, the developing member country should prepare **joint work programs**. It further states that "GEF assistance would focus on funding the agreed incremental costs of accelerating country-driven actions on sustainable land management to preserve ecosystem stability, functions, and services; reduce carbon dioxide emission and improve carbon sequestration; or stabilize sediment storage and release in waterbodies". *GEF assistance would cover three inter-related types of interventions – capacity building, on-the-ground investments, and targeted research – at the community, national, and/or transboundary levels.* 

28. **Strategic Partnership Agreement (SPA).** Another opportunity to accelerate implementation of UNCCD/NAP is offered by the GM and ADB initiative in forging strategic partnerships. The Strategic Partnership Agreement (SPA) between the GM, ADB, Germany and Canada, with the anticipated joining of Switzerland, IFAD and ICARDA would offer new opportunities to enhance funding for implementation of the Tajikistan NAP and to promote regional cooperation among CARs. Vigorous follow up of the outcomes of the current RETA could provide concrete instruments to forge strategic partnerships among donors and domestic stakeholders and also to provide a coherent platform for the mobilization of resources for UNCCD in Central Asia.

#### Main Conclusions/Recommendations

29. Part VI of the main report pulls together the principal issues in implementing the CCD in Turkmenistan. Many of these issues have been briefly discussed in the preceding summary. The main conclusions/recommendations from that section are given below:

1: The Government of the Tajikistan Republic attaches priority to the implementation of the UNCCD. It is recognized that the NAP implementation is held up partly because the Government's budgetary stringency has affected its ability to provide adequate funding for the NAP activities. Notwithstanding prevailing tight budgetary situation, the Government has an obligation under the CCD to provide appropriate resources for the implementation of the Convention. This situation needs to be reviewed at senior levels by the Government to make necessary financing from domestic resources available for the priority programs to combat desertification. As for the development partners, they are supportive of the Tajik PRSP. There is a close nexus between land degradation and poverty. Poor people are highly dependent on natural resources for their livelihood and are most affected by environmental degradation, contamination of water sources and outcome of natural disasters including droughts and floods. It is therefore important that policy makers involved in the PRSP process duly factor in the economic impact of land degradation in making their aid allocation decisions in support of macro-economic and sectoral strategies spelt out in the Tajik PRSP. There is a strong rationale for the multilateral and bilateral donors, consistent with their obligations under the UNCCD, to finance activities which are directly or indirectly supportive of UNCCD objectives through a conscious support to the Convention through the NAP framework. This might provide a good entry point to help trigger policy dialogue on policy issues which relate to sustainable management of natural resources and environment in Tajikistan.

2: Tajikistan has excellent expertise to carry out technical and scientific studies, though its research capabilities in recent years have been affected by lack of equipment and facilities in the research infrastructure, and limited exposure of its experts to the research institutions in other countries working on similar problems. It is also important that such research priorities and their design takes into account not just the biophysical dimension of a particular problem, but also gives due consideration to factors such as participation of the intended beneficiaries, the

institutional feasibility, and some estimation of the benefit cost relationship in reviewing alternative priorities competing for scarce resources.

- **3:** (*i*) It is suggested that the Government takes necessary decisions to strengthen the institutional framework responsible for implementation of the CCD. For this purpose, the office of the NFP needs to be strengthened to host the proposed information center on desertification control.
  - (ii) The Tajikistan administrative structure has faced frequent reorganization, which may require a review of the composition of the National Coordination Body. It would be useful to include the NFPs of the other two Rio Conventions and NEAP on this body and also to have representation of the key officials responsible for steering the PRSP process. This would facilitate mainstreaming NAP into the Poverty Reduction Strategy and the national budgetary and planning process of Tajikistan.
  - (iii) There is duplication of functions among different ministries and state institutions. This blunts the role of policy making. Interrelation and distribution of responsibilities between central and local authorities need to be clearly delineated and improved. The participation of civil society also needs to be encouraged and participatory approaches strengthened.
  - (iv) Capacity building support is urgently needed to strengthen the capacity of the NFP and of the Focal Institution in the following areas:
  - Program development, such as preparation of concept notes and project proposals relating to addressing land and water degradation in order to approach potential donor agencies, including GEF.
  - Sensitization training in cross-cutting concerns such as participatory approaches, gender issues, and sustainable development.

4: It is important that the Focal Institution for UNCCD and its national coordination body (NCB) are proactive in articulating the policy issues which impact on the implementation of the UNCCD and how these could be reflected in the implementation of the Tajikistan PRSP. Two types of issues need particular attention: (a) policy issues which are covered by need to strengthen environment management and administration to promote sustainable use of natural resources, including better maintenance of environmental assets and infrastructure with special attention to arable lands and water storage, distribution and drainage networks; (b) policy issues relating to sustainable agricultural development. Some of the key issues in this context are discussed in Section E and F of Part IV. However, an overarching constraint to the success of policy dialogue is signified by the following statement in the Tajik PRSP: "Funds allocated from the State budget for environmental protection do not cover even essential nature protection measures, and currently there are no other alternative sources of financing". Some of the sectoral policy issues are highlighted below mainly for purpose of illustration:

- Agricultural reforms require acceleration of restructuring in agriculture, transfer of state agricultural assets into private hands, and encouragement of initiatives and investments in the rural infrastructure.
- Addressing issues of salinization, soil erosion, overgrazing and water conservation in the context of their impact on declining agricultural productivity.
- Amending procedures and institutional arrangements at the national and district levels with the purpose to ensure fair and well-organized transfer of land and other assets of agricultural farms to individuals or groups of individuals.

**5:** Considering that financing is a crucial constraint to the implementation of the CCD, a three step approach is needed to approach the issue of resource mobilization:

- (i) Prepare outlines of a credible program of cross-cutting projects and activities, with necessary internal Government clearances within the PRSP medium-term financing framework.
- (ii) Identify the more immediate technical assistance needs targeted at urgent institutional strengthening and capacity building needs of the Focal Institution and other concerned agencies, including some pilot projects responding to local level community based initiatives.
- (iii) Undertake policy dialogue with international development partners within the PRSP coordination mechanism, supplemented by bilateral contacts to firm up specific donor commitments.

**6:** In order to promote synergies between the CCD and the other environmental conventions, the concerned government focal institutions need to develop joint work programs to address land degradation and deforestation to achieve multiple global benefits. For this purpose, it is suggested that the Government may constitute a Working Group of the NFPs of the UNCCD, Biodiversity, Convention, Climate Change, NEAP and GEF, which may meet periodically to promote mutual collaboration. Tajikistan also may be able to get from GEF "enabling activity" grant for land degradation focal area, as it has obtained for "Expedited Financing of Climate Change Enabling Activities". Any assistance in terms of technical and funding support from interested donors to the Government of Uzbekistan for identification of GEF-able project concepts (both national and regional) would be most useful in stimulating implementation of UNCCD.

# TAJIKISTAN: ISSUES AND APPROACHES TO COMBAT DESERTIFICATION (IACD-TJK)

#### Introduction

The Asian Development Bank (ADB), with co-financing from the Global Mechanism (GM) of 1. the United Nations Convention to Combat Desertification (UNCCD), approved the Regional Technical Assistance (RETA) No. 5941<sup>1</sup> to provide technical assistance to facilitate the implementation of the National Action Programs (NAPs) to combat desertification. The activities and outcomes of the RETA in Central Asia are expected to enhance the operations of a growing strategic partnership of donors interested in working together with the CARs to strengthen implementation of the UNCCD in the region. The Tajikistan: Issues and Approaches to Combat Desertification paper (IACD) has been prepared according to the conclusions reached at the working meeting of the National Focal Points (NFPs), the domestic consultant, the international consultant and representatives of the GM and UN Convention to Combat Desertification and Drought (UNCCD) Secretariat, held in Tashkent on October 28-31, 2002.<sup>2</sup> The IACD takes into account the country situation paper (CSP) prepared by the domestic consultant for Tajikistan, Prof. Khukmatullo M. Akhmadov, and a large number of other background documents.

#### I. **Macroeconomic and Poverty Context**

#### A. General

2. The Republic of Tajikistan is located in the Pamir mountains of eastern Central Asia. Its rugged, extreme relief and a sharply continental climate have created four main vegetative zones: desert and steppe in the western part of the country, and mountain and meadow in the east. Most of the population and economic activity are concentrated in the low, broad valleys in the western part of the country.<sup>3</sup> Tajikistan has a total population of 6.187 million and covers a territory of 143.1 thousand km<sup>2</sup>. Even though only 7 percent of the land area is arable, the agriculture sector accounted for 50 percent of employment and 28 percent of the GDP in 1998. However, agricultural productivity is severely affected by land degradation. Natural environment of mountain territory is very susceptible to anthropogenous influences, and about 95% of the territory is subject to the increased risk of ecological destabilization. After independence the country suffered from a chronic civil conflict until mid-1997, when a peace agreement between the Government and the United Tajik Opposition (UTO) was reached, providing political stability and enabling the country to launch serious efforts for economic development. Thus, Tajikistan was a relatively late entrant in the mainstream policy reform process.

#### B. **Economy and reforms**

3. Tajikistan faces a serious challenge to make an orderly transition from a chaotic post conflict situation to a coherent path of economic rehabilitation and growth due to an uneven economic management, weak institutional capacity and sporadic reform efforts. Even before the collapse of the Soviet Union, Tajikistan was one of the poorest areas in Central Asia despite the large annual budget transfers from Moscow. Two thirds of the population is unable to meet their basic needs and its per capita

<sup>&</sup>lt;sup>1</sup> The TA grant was approved in September 2000, with a total cost of \$450, 000 to be jointly financed by the ADB (\$250,000) and GM (\$200,000). CARs covered by this consultancy contract, four other DMCs, namely the Peoples' Republic of China, India, Mongolia and Pakistan. The International Consultant was recruited in July 2001 (Contract # COCS/016.615). The plan of work, as set out in the approved Inception Report, provides for three person months for the International Consultant. <sup>2</sup> The meeting reviewed the interim outputs of the RETA by the domestic consultants and the international consultant.

<sup>&</sup>lt;sup>3</sup> ADB, Environmental Profile of Tajikistan, Publication Stock No. 020700.

income was only US\$ 330 in 1997. In contrast to the other poor countries with comparable income and poverty levels, the bilateral assistance, other than humanitarian aid, has been very small in Tajikistan.<sup>4</sup>

4. Immediately following independence in 1991, Tajikistan not only suffered a five-year civil war, but also suffered a fiscal crisis as budget support of the FSU, which accounted for 40 percent of the country's GDP ceased. As a consequence of these dual factors, the real GDP contracted by 60 percent during 1991-1996. This drastic economic setback occurred in association with the structural change of GDP. The industrial sector's share in GDP declined from 35 percent in 1992 to 18 percent in 1998, while the service sector grew from 27 percent to 40-50 percent, reflecting the overall decrease in production and the newly emerging market oriented environment.<sup>5</sup> The share of agriculture and trade is estimated to have increased from 32% in 1992 to over 40% in 1997. The main resource endowment, on which Tajikistan's growth prospects are dependent, comprise cotton, aluminum, and hydropower. Cotton comprises 40% of total agricultural output while aluminum dominates the industrial sector. These two are the main sources of foreign exchange earnings, and together account for around 50-60 percent of the country's exports. Hydropower generation<sup>6</sup> is due to abundant water resources, which are used mainly for cotton production and power generation. The latter largely supports the aluminum industry. However, both the exploitation of the country's resource assets, and its prospects for a broad based growth and sustained poverty reduction are contingent on maintaining macroeconomic stability, accelerating privatization, reforming the financial sector, restructuring the agricultural sector, and providing direct support to the most vulnerable groups in society. To be sustainable, such growth must be under-pinned by efforts to combat land degradation, with particular focus on the environmental problems associated with mountain agriculture and irrigation. The latter is largely responsible for agriculture's prominence in the economy, and roughly 65 percent of cultivated lands are irrigated.

5. Growth in the near term is expected to originate mainly from agriculture and light manufacturing as a result of increasing agricultural productivity due to farm privatization, and an expansion of agroprocessing and other manufacturing capacity. Achieving even moderate levels of sustainable growth and poverty reduction will require macroeconomic stability, supported by an acceleration of structural reforms, including a significant reduction of quasi- fiscal deficits, especially in the energy sector and a friendlier environment for private activity with an emphasis on improved governance. While the government has prepared a Public Investment Program (PIP), implementation will likely be slow because of the limited absorptive capacity of the country. The current macroeconomic outlook is one of moderate growth, price stability and a reduction in the current account and fiscal deficits. Growth is projected to slow from 6 percent in 2002 to 3 percent in 2010, as the aluminum smelter reaches its full capacity and as productivity gains from ongoing structural reform are fully realized. Export growth is projected to average 6 percent annually while imports are projected to increase by a little less, leading to a gradual reduction in the current account deficit.<sup>7</sup>

# C. Poverty

6. Poverty, defined in terms of income and consumption levels, is very high. Poverty, however, is primarily due to limited employment opportunities and low wages, particularly in the agricultural sector. Poverty also involves decreasing access to such basic public services as education, health care, and safe drinking water supply. There also exists a big divergence in poverty in urban and rural areas. Of the total

<sup>&</sup>lt;sup>4</sup> World Bank, Country Assistance Strategy for the Republic of Tajikistan, June 1998.

<sup>&</sup>lt;sup>5</sup> ADB, Country Assistance Plan (2001-2003), Tajikistan, December 2000.

<sup>&</sup>lt;sup>6</sup> Tajikistan is the World's third largest producer of hydropower, and met 80% of the country's primary energy demand - source: ADB, Environmental Profile of Tajikistan.

<sup>&</sup>lt;sup>7</sup> CIS-7 Initiative, Country Notes, the World Bank, IMF, IBRD and ADB. According to the Tajikistan PRSP, the economy is projected to grow at an annual rate of around 6% over the next few years. A significant source of growth would be the rise in agricultural productivity associated with the breakup of the large state and cooperative farms into family farms.

poorest segments of the population, 18.5 percent live in urban areas and 81.5 percent in rural areas. Of these 45 percent live in Khalton Oblast, 26.1 percent in Leninabad Oblast, 19.2 percent in RRS (Rayons of Republican Subordination), 6.9 percent in GBAO, and only 2.1 percent in Dushanbe. Based on the government's official poverty line criterion, 83 percent of the population is poor, and one-third is classified as "very poor". Based on the purchasing power definition, almost 20 percent are very poor, i.e. their income is below US\$ 1.075 per day purchasing power parity.<sup>8</sup> A survey of households conducted by the World Bank (1198 families from urban and rural areas), demonstrated that total annual expenditures of an average household, including expenditures on food, water, transport, clothes, communal and social services amounted to USD 759. However, the purchasing capacity of the population was as follows: 25% spent less than US\$ 212; 50% spent between \$ 212- \$983; and the top 25% spent more than \$ 983. The average expenditure on food comprised 72% of the family budget. A salary ceased to be the main source of income for most of the families. In 1997 salary was only 22% of the average income.

Poverty has increased significantly during the transition, as a result of dramatic GDP decline and 7. sharp increase in inequality. The most vulnerable groups of the population are children, old-timers and patients or invalids. The hazard of poverty sharply rises depending on number of children in the age of up to 15 years living in a household. Only 7 % of the lonely people living in the households, without children, are poor in comparison with 31 % of those who live at households with 5 and more by children. The government completed an Interim Poverty Reduction Strategy (I-PRSP) in October 2000, and adopted a full PRSP in June 2002. The principal objective of the poverty reduction strategy is to increase real incomes in the country, achieve a fair distribution of the benefits of growth and, in particular, ensure a rise in living standards of the poorest groups of the population. The findings of the TLSS suggest that people without education are twice as likely to live in the poorest households than those with higher education. While official statistics do not show a significant difference in poverty incidence between women and men, women often find themselves in a more difficult situation than men, especially in the case of households headed by women, mainly in the Khatlon region and Garm group of districts, the most war-torn area. Such households are often found to have less access to and other agricultural resources. To be able to measure progress in the fight against poverty, the Government has selected a number of poverty indicators and set itself specific quantitative targets to be achieved for each of these within a certain period of time. In the selection of indicators, the Government has adopted some that were established as part of the Millennium Development Goals by the UN. Table 1 below lists the indicators, the present situation in Tajikistan and the targets to be reached.

Indicator	2001 year	Mid-term target for 2006 year	Target for 2015*year
% of population living below poverty line	83	75	60
Primary education coverage (%)	77,7	82	90
Infant mortality rate per 1000 live newborns (2000)	36.7	32	25
Maternal mortality rate per 100000 live newborns (2000)	43,1	40	35
% of adult population with access to reproductive health services	21,8	24	30
Share of Private Sector in GDP	30	40	60
% of population with access to pure drinking water	51,2	58	80
Employment rate among able-bodied citizens	56	59	65-70
# of Telephones per 100 residents	3,6	4	5

#### Table 1: Poverty Reduction Targets

\* Year established by the UN as a target year for the Millennium Development Goals

<sup>&</sup>lt;sup>8</sup> Government of the Republic of Tajikistan, Interim Poverty Reduction Strategy Paper, Dushambe-2000.

#### II. Land Degradation/ Desertification

#### A. Main areas affected by degradation

8. Tajikistan is wedged into Uzbekistan and partly into Kyrgyzstan, occupying the western side of Fergana Valley. The republic's boundaries are surrounded with desert and semi-desert plots of the Turan lowland that gradually transforms into hills and foothills.<sup>9</sup> According to the Tajik NAP, "now 97.7% of the territory of agricultural lands of the Republic, somehow or other are subject to erosion, though in 1973 this parameter made up only 68%."<sup>10</sup> The erosive processes have been especially active in the foothill regions where poorly cemented sandstones, loess like loams and similar rock predominate that lend themselves to washing out and wind erosion. The development of erosive processes depends on a complex of the natural and anthropogenous factors. The geomorphologic factor renders influence on character of formation of a drain, speed and kinetic energy of a flow, i.e. works by means of flowing down water. The degree of development of erosion in this process depends on a steepness, length. exposition of slopes, depth of local bases of erosion, area of water collection, negative forms of a relief, at the bottom of which ravines develop. The two main factors underlying the process of soils degradation in Tajikistan are water erosion and gully erosion. The human economic activity plays a significant role in accentuating the erosive processes through intensive development of agriculture on slopes and unsustainable cultural practices.<sup>11</sup>

9. Owing to the very large distinctions in absolute heights of the republic, oddity of a mountain relief, and variability of climate and other natural-anthropogeneous conditions, the soil-erosive processes (in common concept of desertification or degradation of a soil cover) vary and differ among themselves within the limits of small sites. In the south of motley low hills there are small sites of the unfixed sand and zone of strong degradation development (in Karadum, Kumjalolkum and others). Above these zones are located semi-fixed sand and areas of weak and average deflation development. Among sandy massifs the raised areas strongly subjected to water erosion are located. In the limits of Yavan, Gozimalik, Vakhsh and other districts there are sites of different degrees of erosion, washing away, mainly of water origin. In the limits of irrigated zones, a wide variety of erosion processes are at work. On slopes of the mountain ranges: Babatag, Aktau, Karatau, a number of sites facing water erosion, varying from poorly-, middle-, and strongly eroded sites are found. Middle -eroded lands are located in a zone of brown soils (within the limits of mountain ranges: Vakhsh, Sarsaryak, Terilkitau, Jilintau, Khazratshoh and others). Gully erosion and strongly eroded sites are widely distributed here. The following table 2 shows the extent and intensity of land degradation by main areas of Tajikistan.

	Degree of erosion (%)					
Administrative districts and provinces	Non- eroded	Weakly eroded	Middle eroded	Strongly eroded	Very strongly eroded	Common area
Kurgantyube group of districts	3,2	18,8	51,8	18,0	8,2	96,8
Kulyab group of districts	2,0	14,0	43,0	26,4	14,6	98,0
Leninabad province	2,8	4,5	58,6	22,0	12,1	97,2
Hissar group of districts	4,3	9,4	40,2	31,5	14,6	95,7
Garm group of districts	0,5	4,2	35,1	32,9	27,3	99,5
GBAO	-	4,2	32,6	37,8	25,4	100,0
Source: Tajikistan: Country Situation Pa	per (CSP).	-	-			

#### Table 2. Distribution of area of erosion and deflation of soils

<sup>9</sup> Tajik CAMIN Working Group/ADB, National Strategy and Action Plan for Sustainable Mountain Area Development of Tajikistan, June 2001, ADB RETA #5878-REG "Regional Cooperation for Sustainable Mountain Development in Central Asia.

<sup>10</sup> Tajikistan NAP-UNCCD, section 3.15, p. 63.

<sup>11</sup> See Tajikistan: Country Situation Paper, by the domestic consultant for Tajikistan, Prof. Khukmatullo M. Akhmadov, for a more detailed discussion of land degradation processes.

# B. Types of land degradation and underlying causes

10. The most typical characteristics of the natural conditions of Tajikistan, which determine the peculiarities of the natural and geographic environment of its regions and zones, are predetermined by the fact that it is a highly mountainous country. The second peculiarity of almost all mountains in Tajikistan is the presence of smooth surfaces, which are known as "dashts" and "pushta" and influence location of different industries. The relief structure has an especially strong influence upon the location of where certain crops are located. The topography also determines which machinery is used, the quality and method of soil irrigation, and the productivity of the land. Thus, intensive agricultural activity on slopes inevitably results in erosion. Soils are washed out, and the growth of ravines tends to decrease the areas of arable soils. Even in the flat lands of Fergana, Gissara, Vahasha and Kabodina, a large amount of farming soils are scattered over the hills, small ravines, and dales. For example, the hilly parts of cotton fields suffer from under watering, while in the places where there are depressions, crops suffer from an oversupply in water. Both negatively affect the productivity of cotton fields - it decreases by  $5^0$  C. from each hectare.

11. While the natural factors no doubt create conditions for occurrence of erosion, the intensification of desertification processes is due to a significant extent as a result of human activities. The main reason of the intensive development degradation of soils in a zone of rain-fed agriculture is promoted by development of abrupt slopes, bottom and slopes of the negative forms of a relief, reservoirs of the small rivers, ignoring anti-erosive measures and others. Under rainfed agriculture the slopes with the steepness up to  $25^{\circ}$  are widely used now, ignoring observance of organizational and agrotechnical anti-erosion measures.

12. On irrigating lands as a result of the half-willow the wash-off and washing out occur, which are called irrigation erosion, the latter brings huge damage to a national economy. Watering of agricultural crops on the most part of the republic is carried out by a surface irrigation. According to the Tajikistan's National Action of Program (NAP), two main factors accounting for irrigation erosion are: (a) technology of development of lands with falling earth and inappropriate layout of fields etc.; and (b) the development of processes of wash-out and washing off of soils due to water collecting and drain networks.

13. Under influence of unlimited pasture of cattle, anti-erosion quality of a grassy cover significantly falls, herbage is broken, some plants are destroyed, others are slowing down their growth and soils are easily exposed to destructive processes. All pasturable lands of Tajikistan are strongly subject to erosion - 89% of the area of summer pastures and 97% of the winter pastures are exposed to medium to strong erosion.

14. Lately one of the most powerful anthropogeneous factors of development of desertification is due to felling of unique, nature protection mountain forests, bushes and half-bushes. The unscheduled cutting of forest vegetative formations for fuel have the menacing size, especially on forest lands of collective farms and state farms, but renewal, planting and others forestry-melioration measures are very slow or are not carried out at all. The annual production of major agricultural products is estimated to have decreased due to land degradation by as much as 50 to 60 percent. *There is a close nexus between land degradation and poverty. Poor people are highly dependent on natural resources for their livelihood and are most affected by environmental degradation, contamination of water sources and outcome of natural disasters including droughts and floods.*<sup>12</sup> It is therefore important that policy makers involved in the PRSP process duly factor in the economic impact of land degradation in macro-economic and sectoral strategies.

<sup>&</sup>lt;sup>12</sup> Tajikistan PRSP

### C. The economic costs of land degradation

15. There is no comprehensive study to estimate the economic costs of land degradation. The closest approximation is some evidence of decline in agricultural productivity provided in the Tajik NAP (p. 68-71) and summarized in the report of the Tajik CAMIN Working Group on "National Strategy and Action Plan for Sustainable Mountain Area Development of Tajikistan (NASAP). Land degradation has been a major contributor to a noticeable decrease in the gross yield of many crops. The Tajik NASAP estimates that "the decrease in production of only four agricultural plants caused a loss of 281 billions rubles (US\$ 224 million) to the country's economy."<sup>13</sup> These four agricultural plants are: raw cotton, potato harvest, vegetables, and melons and gourds. For instance, the gross yield of raw cotton in 1992 was 514 thousand tons, while in 1997 it was 353 thousand tons. This is estimated to have resulted in a national loss of US\$ 161,000. The potato harvest in 1997 was 39 thousand tons as compared to 128 thousand tons in 1992. The production of vegetables and melons and gourds fell from 543 thousand tons and 136 thousand tons respectively in 1992 to 351 thousand and 64 thousand tons respectively in 1997. The annual agricultural production for major products is estimated to have decreased due to land degradation by 50% to 60%. Other estimates of decline in production/productivity provided in the NASAP report are summarized below:

- The Khation region has faced as a result of drought decrease in harvest per hectare of 5.5 centners during the period from 1994 to 1997, amounting to an economic loss of US\$ 715/ha. It is also estimated that in the major food products, the decrease in productivity per capita amounted to 82530 rubles (US\$660).
- Deterioration of pastures by over-grazing has caused massive erosion process that has resulted in continuing decrease in the quality and quantity of fodder crops affecting milk production and weight gain of the animals. The quantity of milk from a typical cow decreased by 50 percent, and in some regions by as much as 55 percent. Production of livestock meat decreased to 29.6 thousand tons in 1997 40.7 thousand tons less than what was produced in 1992.
- In the ultimate analysis, all the factors, such as climate change, productivity and agriculture production decrease, are having a negative effect on the health of the country's population.
- Desertification has caused a great reduction in the number of livestock. In the 1999 cattle decreased to 195.9 thousand as compared to 1998, goats decreased by 178.5 thousand and so did other livestock species. The total economic loss due to such decline in numbers, according to NASAP adds up to a total of rubles 67767 thousand (US\$ 542 thousand)

# III. Implementation of the UNCCD

# A. NAP process in Tajikistan

16. The National Action Program for UNCCD implementation was approved by the second National Forum in 2000, and received formal government approval vide the Government of the Tajikistan Republic decision<sup>14</sup> in December 2001. NAP was prepared by a "Temporary Creative Collective" - an inter agency Group of experts (TCG) - under the aegis of the Ministry of Nature Protection. The TCG was organized in 1998 from among the representatives of the various ministries and departments, and also representatives of non-governmental organizations. The members of TCG also participated in regional

<sup>&</sup>lt;sup>13</sup> Tajikistan NASAP, section 3.1, p. 36.

<sup>&</sup>lt;sup>14</sup> Decision # 598 dated 30 December, 2001

seminars and two National Forums with the purposes of the NAP elaboration and approval. The preparatory process was steered by a TCG secretariat with the current National Focal Point for UNCCD, D.K. Gulmakhmadov, as the coordinator. The preparation was assisted by the UNCCD Secretariat (\$8,000), and UNSO / UNDP with funds (\$50,000) provided by Finland. The NAP is intended to "become a state managing document for concrete planning and step by step implementation of measures on performance of the UN Convention to Combat Desertification". An English translation of the NAP was prepared and printed with assistance from the UNDP in Tajikistan. With the establishment of the Committee on the Land Resources and Land Management of the Republic of Tajikistan. Mr. Davlatsho K. Gulmahmadov, Chairman (Deputy Minister) continued to be the National Focal Point of UNCCD. It may be noted here that in Central Asia, the Tajik NFP-CCD is the highest-ranking official (Deputy Minister) to have been designated to be in charge of coordinating the implementation of the UNCCD. He has also been associated with the NAP process from 1997 when Tajikistan officially joined the Convention.

17. The NAP is a well structured document, which sets out a wealth of data on the country's natural conditions and resources; social and desertification conditions, processes of desertification, pollution, natural disasters, and deterioration of lands in the context of post-conflict situation; ecological, economic and social consequences of desertification; and 'strategy of actions'. Two elements in the NAP are worth particular attention from the perspective of elaborating a concrete programmatic content of projects to combat desertification:

- Scattered in the NAP are disaggregated data and discussion of actions needed to combat various problems associated with land degradation by geographic areas, in some cases providing costs involved. As an illustration, at page 70, the NAP lists need for collector cleaning to control salinity and provides some rough estimates of what this would cost. It would be helpful to pull together and analyze this information on a systematic basis for preparing a few concrete project concepts for participatory local area-based development interventions or LADPs.
- The NAP provides an excellent discussion of the system of collection and processing of information on desertification, and conceptual basis for design on monitoring desertification (see Section 5.1, p.73-83). The largely conceptual discussion on the subject should be of broader general interest to experts involved in M&E system development in land degradation and could be a useful basis for a TA project in Tajikistan.

18. A positive feature of the Tajik NAP is its status as an official program (approved by a formal Government decision) aimed at combating desertification and implementation of the Convention. In this program the basic processes resulting to desertification, to consequences of this problem, as well as conducting of a number of strategic actions for prevention and overcoming of this process are reflected. However, a major constraint to its implementation is that neither Ministry of economy and trade, nor Ministry of the finance of the republic has given their consent on a source of financing because of difficult national budgetary situation - a problem common to all the five CARs. In effect some of the work started in the Soviet period to combat water and wind erosion, such as agro-technical afforestation, hydraulic engineering and other anti-erosion and re-deflation measures, could not be continued for lack of funds. *It may also be noted that while NAP is a useful source document for UNCCD implementation, there is need to complement it with a sharp and clear statement of the strategy, priorities and programs to combat land degradation, which can be appropriately reflected in the final Poverty Reduction Strategy Paper (PRSP).* 

## B. The Focal Agency & Institutional Framework

19. The Focal Agency for the implementation of the UNCCD-NAP in Tajikistan is the Committee on Land Resources and Land Management. The Committee has the right mandate and strong commitment to implement the UNCCD. However, it is under-staffed and under-funded. It needs technical assistance to strengthen its implementation capacity as well as funds to develop concrete projects and programs based on the NAP-CCD. As already mentioned, the National Focal Point for UNCCD, is an experienced and senior Government functionary, with a strong sense of dedication to the Convention. Even a relatively modest technical and funding support would enable him to launch the implementation of the NAP and carry with him the other concerned agencies.

20. The coordination of implementation of the Convention requirements and NAP implementation at all levels is carried out during the sessions of national coordination body (NCB) based on the outcome of the discussions on the issues placed by the NFP before the NCB. However because of the limited financing, not many activities are happening on the ground. One important area on which discussions seem to have focused is about the need to create a uniform information network, which would cover all regions of the republic. Such a network would need access to the Internet, web-sites and electronic mail. *For this purpose, the office of the NFP needs to be strengthened to host the information center on desertification control. Establishment of this center is necessary, as the numerous initial data concerning combating desertification are stored in several scientific and project organizations, which needs to be pulled together in a manner that it can support policy and program dimensions of the NAP-CCD and better service the work of the NCB. The interagency coordination mechanism with participation of all the concerned agencies (CLRLM, Nature Protection, Agriculture, Water Resources, and Finance) also needs to be formalized and activated. It is suggested that the Government takes necessary decisions to strengthen the institutional framework responsible for implementation of the CCD.* 

21. The Tajikistan administrative structure has faced frequent reorganization, which may require a review of the composition of the National Coordination Body. It would be useful to include the NFPs of the other two Rio Conventions and NEAP on this body and also to have representation of the key officials responsible for steering the PRSP process. This would facilitate integrating NAP with the Poverty Reduction Strategy and the national budgetary and planning process of Tajikistan.

# C. Strengthening NAP process and participatory approaches

22. Section 5.5 of NAP discusses "Raising of role of the local population, non-governmental organizations, including female organizations, in struggle against desertification". There are more than thirty ecological NGOs in Tajikistan, some 25 of them members of the Tajik Public Ecological Council. The women NGOs have a special interest in the problems of environment and health. The main NGO is the Association called "Women of Tajikistan Science" with main focus on ecological education for protection of environment. Another relevant NGO is the Youth Eco Center, which has been active in Tajikistan since 1995. Its main focus has been on conducting seminars on ecology for the teachers, youth and NGOs. It also issues a bulletin Tabiat", containing the local ecological information necessary for development of civil groups. It will perhaps be fair to say that the bulk of the NGOs are professional groups or associations and there are not many NGOs working at the grassroots with the rural communities. Also the NAP process needs to look beyond the current emphasis on awareness building activities to promoting community-based organizations active in developing local initiatives to combat land degradation.

23. No doubt, in order to promote participation of the population, including women in activities to combat desertification, it is necessary to improve the public awareness of the challenge posed by

desertification and what needs to be done by the local population to prevent land degradation. Diagram 1(based on NAP) sets out an illustrative framework of possible interrelationship between NGOs and other actors involved in combating desertification. However, it is equally necessary to evolve mechanisms to strengthen participatory processes, which help organize local populations around specific activities, such as water users associations. *In the present state of public administration structures, the NGOs can play an important role in extending the outreach of the NAP activities to the local communities. However, the NGOs themselves would need considerable training to perform this role. In this context, the NAP makes two important points which need to be followed up:* 

- To attract the local population to the pilot projects with the purpose of use of their knowledge and skills in the field of revival of national-traditional methods and technologies in combating desertification.
- Development of the gender analysis, methodology and procedures for activation of women in implementation of NAP/CD.

24. **Synergies between the NAP-CD and other Rio Conventions and NEAP**: The importance of promoting synergies is recognized by the NAP. Here again, the engine to drive this process is missing. To promote synergies, the environmental conventions need to develop joint work programs to address land degradation and deforestation to achieve multiple global benefits, including poverty alleviation; and preservation of ecosystem stability, functions, and services such as soil and watershed protection, carbon uptake and storage, water purification, climate regulation; and nutrient retention.<sup>15</sup> Strengthening the programmatic content of the **Joint Work Programs** would catalyze collaborative activities around concrete action areas. Mere emphasis on establishing formal administrative mechanism, important as they are, would not be a sufficient condition to promote synergies. *For this purpose, it is suggested that the Government may constitute a Working Group of the NFPs of the UNCCD, Biodiversity, Convention, Climate Change, NEAP and GEF, which may meet periodically to promote mutual collaboration.* 

25. **Capacity building needs of National Focal Point and of Focal Institution for UNCCD.** Capacity building support is urgently needed to strengthen the capacity of the NFP and of the Focal Institution in the following areas:

- Program development, such as preparation of concept notes and project proposals relating to addressing land and water degradation in order to approach potential donor agencies, including GEF.
- Communication skills, translation and interpretation in order to encourage active interface with international and bilateral agencies and their sensitization as to the importance of the Desertification Convention to the country's goals of sustainable economic growth and poverty reduction.
- Selective training in donor agency procedures, with particular emphasis on the partner agencies in the GM/ADB strategic framework agreement, and GEF.<sup>16</sup>
- Sensitization training in cross-cutting concerns such as participatory approaches, gender issues, and sustainable development.

<sup>&</sup>lt;sup>15</sup> GEF draft OP # 15 emphases such joint work programs.

<sup>&</sup>lt;sup>16</sup> With the recent amendment to the GEF Instrument, GEF has designated "land degradation, primarily desertification and deforestation", as a GEF focal area, as a means of enhancing GEF support for the successful implementation of the UN Convention to Combat Desertification.

26. **Promoting a three-pronged approach to implementation of UN CCD**. The NAP process must look beyond the narrow focus of emphasis on the technical and scientific dimension of desertification to a cross-sectoral approach to understanding and tackling the underlying root causes. Thus, the focus of NAP implementation should be on a three-pronged approach:

- Mainstreaming with the CDF, NSPR, NEAP and Land and Forest Management Plans, and Strategy and Action Plan for Development of Mountain Territories.
- Participation of Civil Society organizations, such as NGOs, CBOs and rural communities (see Diagram 1).
- Operational orientation to the implementation process through focus on pilot projects and cross-sectoral investment projects of concerned agencies.



# **IV.** Policy framework

# 27. The main policy issues in the context of UNCCD are:

- A. Macro Policy Agenda
- B. Poverty Reduction Strategy
- C. Legal Framework
- D. Natural Resource Management and Environmental Policies
- D. Agricultural Policies
- E. Water Conservation Policies
- F. Evolving a cohesive Strategic Policy Framework

#### A. Macro Policy Agenda

28. The Tajikistan Government strategy laid down in its Poverty Reduction Strategy Paper, adopted in June 2002, emphasizes the goal to "create the conditions for accelerated and socially fair economic growth, essential for increasing incomes and raising living standards". The economy is projected to grow at an annual rate of around 6% over the next few years. A significant source of growth would be the rise in agricultural productivity associated with the breakup of the large state and cooperative farms into family farms, which is expected to continue as the ongoing process of land reform gathers pace. The creation of small and medium private enterprises, including growing activity in the informal sector, is also expected to become a major source of jobs and output. To stimulate the latter, the Government will take measures to create a competitive banking sector, facilitate the mobilization of savings and increase credit opportunities. Macroeconomic management will aim at establishing a stable economic environment through appropriate fiscal, monetary and exchange rate policies. Within the context set by the globalization process, the Government will encourage export-oriented growth to help solve the problems of external debt and benefit from the country's comparative advantages. Growth will be achieved through creating of favorable environment for the private sector investments and operations to be supported by effective public service delivery and public investments. With tighter monetary policies and a projected increase in money demand as confidence in the currency and the banking system increases, inflation is projected to decline from almost 40 percent in 2001 to an average of 5 percent per annum in the medium term. While there would be some fiscal consolidation, the narrowing of the large current account deficit over the projection period would be achieved mainly through an improvement in the savings and investment balance of the private sector. Also, the current inter-bank foreign exchange market, while an improvement over the previous system, still needs further liberalization.<sup>17</sup>

29. **Public Debt Management.** The total cumulative public debt amounted to 129% of GDP at the end of 2000. The ratio of the present value of the debt to government revenues exceeded 400% by the end of 2000, well above the modified HIPC threshold of 250%. In spite of a number of debt restructuring agreements with the main official creditors during 1996-2001, the debt service burden remains high. This will put economic development of the country at risk and limits possibilities for poverty reduction interventions. Source: Tajikistan PRSP. Part of the arrears relates to the restructured concessional bilateral debts and long-term loans extended by international financial organizations. As part of its debt management policy, the Government intends "to seek with our major creditors as well as additional financing on concession terms". The Government will establish a policy regarding the level, terms and purpose of attracting external loans and economic criteria will be applied in selection of projects for the public investment program. Government borrowing on non-concessional terms will be prohibited.

<sup>&</sup>lt;sup>17</sup> CIS-7 Initiative, the World Bank, IMF, ADB and IBRD, Country Notes, 2002.

## **B.** Poverty Reduction Strategy

30. The Government has identified four main elements that together constitute its strategy towards reducing poverty. They are: (i) encouragement of an accelerated, socially fair and labor-intensive economic growth with emphasis on export; (ii) efficient and fair provision of basic social services; (iii) targeted support to the poorest groups of the population; and (iv) efficient governance and improvement in security. The Government's efforts to encourage private sector activity to create jobs and increase income are a central part of its anti-poverty program. They will focus on the proper functioning of markets by (a) establishing a legal and regulatory framework related to establishment and development of enterprises and work places; (b) privatization of state enterprises, giving priority to those especially in agriculture; and (c) assisting the development of financial markets. The other main plank of the strategy directed at the poor relates to social protection. Social sector expenditures in the following three years will comprise of two components. The first component consists of basic expenditures on healthcare, education, pensions and the revised system of cash compensations. The second component consists of special allocations for poverty reduction programs. The PRSP further emphasizes that an important condition for poverty reduction is efficient use of, and access of the poor to, the key resources, in particular land and water. . However, PRSP does not make a specific connection between poverty and land degradation/ desertification concerns. It is recommended that the NFP-CCD and the Ministry of Nature Protection collaborate to ensure that the environmental concerns get reflected in the PRSP policy matrix and are highlighted as important issue areas for support at the level of policies and programs.

31. **Public Administration Reforms**. Key sectors from a poverty alleviation perspective include education; health; social protection; agriculture; privatization, labor and private sector development; infrastructure and telecommunication; and environmental protection and tourism. In addition to the adoption of appropriate policies and actions in relevant sectors, a successful poverty reduction strategy will need effective macroeconomic management and efficient public administration. Reform of public institutions covers a wide range of actions. Measures aimed at improving the functioning of the executive branch of the state and in particular, as a priority, in sectors of immediate relevance to the welfare of the poor, i.e. the social sectors, agriculture and agencies responsible for development of private sector activity. Implementation of public management reforms envisages a complex of measures providing all together for the effectiveness and productivity of the public system. These include (i) a clear definition of the role and responsibilities of ministries and agencies, avoiding duplication of functions, and development of an organizational structure and staffing in line with their objectives; (ii) strengthening of financial control over the use of public resources; (iii) establishing a professional civil service; and (iv) promoting transparency of operations of public bodies. Poverty reduction requires better management and more effectively and efficiently operating institutions both in state and private sectors in order to raise the level of protection of the most vulnerable groups of the population and increase access to public services. It is also essential to strengthen civil society's role in public affairs and an active participation in local governance.

#### C. Legal Framework

32. Tajikistan, like other CARs, has adopted a number of laws and resolutions to protect the environment. The main acts regulating environmental protection is summarized in table 3:

Law on Mining (1994)	The law requires the regulation and rational use of resources from the ground.				
Law on utilization of Wildlife	Law to protect wild life and regulate interaction of humans with it and use of it				
(1994)	by protecting habitat.				
Law on Air Protection (1992)	Address protecting air quality for humans, plants and animals, providing pollution control measures, improving air quality and establishing government regulation of industrial sites.				
(i)Law on Land Changes (1992) (ii)Decision # 294 (1997)* "About	Authorizes charges for various land uses.				
the state control of use and	With the purpose of conservation and rational use of lands, keeping lands free				
protection of lands"	from land degradation and overcoming of desertification. The State committee				
	for land management and the Ministry of environment protection are state- authorized bodies for state control on land use and protection.				
Resolution on the Unauthorized Collection of Substances (1990)	Regulates the use of medicinal materials, including wild species of plants found in nature.				
Resolution on the Ministry of Environment (1992)	Lays down the rights and responsibilities of the ministry.				
Resolution of State Control of Environmental Protection & Use of Resources (1994)	Establishes the role, functions and tasks of the state in inspecting human and economic activities to assess compliance with existing laws and regulations.				
Resolution on State Ecological Review (1994)	Establishes the rights and responsibilities of the Ministry of Environment related to reviewing all government-proposed development projects to enforce environmental protection laws about rational use of nature.				
Resolution on State Ecological	Definition of fundamental goals and tasks for the ecological-economic				
Program (1997)	development of the republic.				
Source: ADB, Environmental Profile of Tajikistan. * Country Situation Paper for Tajikistan, p.24.					

Table 3: Main Environmental Legislation in Tajikistan

33. The main limitations of the legislation in the CARs are: serious inconsistencies in legislation, weak administrative capacity to implement the law and considerable scope for bureaucratic discretion in application of laws and regulations. They can be overcome by efforts over time to plug the loopholes and enforce compliance. The Judiciary system faces problems because much of the legislation was not designed to apply to a market economy. Also, the legislation dealing with property rights and contracts is unclear and contradictory. Taken together, these weaknesses hinder the process of economic reform. Legislative reform, reviewing the old and outdated acts and passing new ones, is an ongoing process. With ADB assistance, the Government established the Law Reform Commission in April 1999 to review the consistency of laws and other legislation and to publish them. The Tajikistan PRSP emphasizes the need for institutional and legislative reforms. Restructuring state administration and improving the delivery of public services will necessitate institutional reforms. The legal system will be reformed to improve transparency and reduce possibilities of subjective decisions, and the reforms should extend to environmental legislation and regulations.

#### D. Natural Resource Management and Environmental Policies

34. Natural Resource Management practiced in agriculture, irrigation, forestry and pastures have contributed to the problems of land degradation and pollution. There is a large common ground between approaches to sustainable natural resource management and measures to combat desertification. Land and water degradation constitute major manifestations of environmental degradation. Major environmental problems in Tajikistan are land degradation, deforestation, deterioration of protected areas and wild life, limited availability of clean drinking water, irrigation salinity and erosion, and natural disasters. The policy makers need to recognize that improved environmental conditions and better environmental management are a fundamental requisite for achieving long-term and sustainable economic growth. It is necessary to identify basic weaknesses policy, legislative and institutional frameworks to promote environmental friendly natural resource use. In Tajikistan the environmental legislation is basic, and resolutions, which do not carry the same weight as laws, are the most common tools to enforce

environmental conditions and requirements. Cost recovery is weak, fees are too low to encourage conservation, and fines are too low to encourage compliance. The Government has started implementing the National Environmental Program for 1998 – 2008 aimed at ensuring rational use of natural resources. However, the country lacks specialized and appropriately equipped services to study, forecast, and provide zoning and monitoring of detrimental impact of potential sources of natural disasters for the purposes of developing and undertaking preventive measures.

# E. Agricultural Policies

35. According to the I-PRSP, the agricultural sector is characterized by two features, which aggravate poverty among the rural population. These are: (i) incomplete land reform which does not allow effective use of the land and agricultural production opportunities; and (ii) weaknesses in the current management and operating system of major agricultural sub-sectors, especially cotton production. More generally, organizational structures, management systems and government thinking in agriculture are still far from requirements of a market economy. In addition, equal access to land, in particular for the rural poor, is impeded by the high costs and complicated procedures for getting land use certificates, the lack of information on procedures, and the lack of knowledge about land use rights. Notwithstanding these issues, the final PRSP states that by early 2001 land entitlements for 50% of arable lands had been transferred to private farmers. *While arable land is scarce, experience in recent years, based on the ongoing restructuring of the large state owned and cooperative farms, has shown that the transition to private farms can substantially raise yields. Agricultural reforms require acceleration of restructuring in agriculture, transfer of state agricultural assets into private hands, and encouragement of initiatives and investments in rural infrastructure.* 

36. Based on the new farm structures, more than 60 percent of arable land can be considered to be managed by private farms. It is estimated that dehkan farms constitute about 25 percent of arable area; joint stock, cooperative or lease companies cover about 20 percent; and mini farms constitute around 15 percent of arable area. A serious problem however is about user rights. The registration system lacks comprehensive coverage of land information and legal interests. There is no reference to the location of the plot or indication of its relation to the boundaries of surrounding parcels. In addition, not all rights to a land plot are recorded with the land registration system. As the land market develops, this will require time consuming and complex searches in order to get all relevant information on a land plot. The process for registering land rights and shares and receiving a land certificate is complicated and expensive.<sup>18</sup> Further, state interference with cotton growing has also impacted on land reform. Because of the concern of both state and private cotton traders to minimize the numbers of cotton contracts for ease of contract administration, there has been a strong tendency to retain large-scale farm units. A further problem is the limited access to internal markets, because of informal barriers and high transaction costs. In the case of cotton, there is lack of competition, interference by the government, delays in payments and unjustified under-pricing for raw cotton relative to international prices. As a result of the restructuring of collective farms into dehkan associations, farming decisions have undergone some positive change. However, de facto, farm management decisions, in particular, regarding the pattern of areas to be cultivated and the assortment of crops are still taken solely by certain managers and authorities. Some official interference in the process of pricing, procurement and marketing still remains. Infrastructure to serve the farms, i.e. supply cooperatives, trade and procurement organizations, companies providing with small machinery and transportation services, has not been set up.

<sup>&</sup>lt;sup>18</sup> Tajikistan, Country Situation Paper.

37. Agricultural reforms require acceleration of restructuring in agriculture, transfer of state agricultural assets into private hands, and encouragement of initiatives and investments in the rural infrastructure. The I-PRSP made a number of recommendations to establish an appropriate institutional framework and clear by-laws:

- amending procedures and institutional arrangements at the national and district levels with the purpose to ensure fair and well-organized transfer of land and other assets of agricultural farms to individuals or groups of individuals;
- introducing a simple and cheap system of land registration, and reducing costs associated with getting land use certificate to an affordable level;
- drafting relevant rules, regulations, registration requirements and membership criteria, on the basis of which agricultural credit and savings associations can be established;
- drafting legislation on water resources, envisaging establishment and functioning of independent and autonomous water supply and water distribution organizations, as well as water -users associations;
- ensuring transparency in the pricing process within the state procurement arrangements; and
- keeping raw-cotton producers informed about market developments; supporting competition in cotton ginning and trading;
- drafting and introducing mechanisms of gradual cost recovery on operating costs, maintenance work and repairs of the irrigation and drainage infrastructure;
- establishing a logistical and technical base for land and water resource management.

# F. Water Conservation Policies

38. From the perspective of combating land degradation, water resource management policies play a crucial role. Water resources management requires tackling a wide range of issues, none of which has straight forward solutions:

- Irrigation water use efficiency issues.
- Domestic water distribution issues.
- Freshwater and potable water supply.
- Regional water sharing policies.
- Issues of water pollution.

39. Tajikistan is rich in water resources. There are around 8500 glaciers in its territory and the ice volume of all glaciers contains stocks of fresh water equivalent to nearly 400 Km<sup>3</sup>, which is almost 8 times the yearly drainage of all the rivers in Tajikistan. The main volume of the annual drainage comes in the spring period and the yearly average liquidation in Tajikistan is placed at 43.7 km<sup>3</sup>. The yearly utilization of water resources for agricultural purposes consists of 20-22% of the total drainage. The main parts of Tajikistan's water resources have a transit-flow character, and are forwarded in the neighboring states. The main drainage basins or watersheds comprise Amudarya, Zeravshan and Syrdarya. The total watershed area of Amudraya River is 189.4 thousand km<sup>2</sup>, while that of Syrdarya (with outlet into Aral Sea) is 444 thousand Km<sup>2</sup>. Significant ground water reserves are found in all the major river basins in Tajikistan. An important trans-boundary issue of rational water use is how to adopt a watershed development approach cutting across national boundaries. Tajikistan is one of the few countries where internal politic al boundaries (oblast or raions) correspond closely with watershed boundaries. This should

greatly facilitate the adoption and implementation of watershed-based approach to environment management.<sup>19</sup>

40. According to the Scientific Research Institute under the Ministry of Agriculture, 60 percent of the irrigated territory in 1996 suffered from water erosion. Erosion-control measures on irrigated lands were put on hold for want of funds. About one third of area under irrigation is dependent on pumping. Irrigation water is diverted from rivers by gravity, but in many cases is then lifted by large pumping stations into main canals. In some regions, the supply of irrigation water is energy intensive because of high lifts. The main problems associated with irrigation are: on the supply side these are caused by (a) low river levels; (b) silting up of the main and distributary canal sections thus reducing the useable discharge; (c) excessive seepage losses from canals through cracked or broken linings or where repairs have been carried out with poor supervision using inferior materials; (d) lack of working cross regulators so that efficient water distribution is not possible, i.e. serving different areas with different water demands on rotation; and (e) power shortages. On the demand side, water shortages can be created in the downstream areas of the system because of heavy withdrawals at the head through users taking more than their share. Waterlogging causes secondary salinity. About 4,000 to 5,000 ha are taken out of use per year because of salinization and waterlogging. Another problem is the poor performance of the drainage system through physical blockage or under-design. A problem that needs to be monitored relates to the rise in water table. It is estimated that groundwater levels three meters or less from the surface characterize nearly 30 percent of all irrigated lands. Lands in Leninabad are particularly in most advanced stages of land degradation due to combined problems of salinization and high water tables.

41. Agriculture accounts for 90 percent of water consumption. Water use inefficiencies are attributable to a number of factors - deterioration of storage and irrigation infrastructure involving water losses, weak on-farm water management and conservation frameworks, primary and secondary salinization due to wind and water erosion, water-intensive cropping patterns and absence of a strong regulatory system of incentives and disincentives to promote water conservation. The challenge for policy makers is how to move simultaneously on (i) implementing reconstruction of irrigation and collector-drainage networks, (ii) improving technology and watering technique with due regard for population and water consumption of other sectors of national economy, (iii) and improving water use efficiency. A major inefficiency in water use occurs in the fields and is a result of wrong calculation of irrigation water amount required, and its inefficient use. In-field water use efficiency is often only around 20 percent and is rarely greater than 40 percent. Often field losses are not counted since there is no monitoring of water distribution and losses at the lower end of the system. Because water charges are not related to volumes used, and are in any case only partially collected, there is scant regard for water use economy.<sup>20</sup>

## G. Evolving a cohesive strategic framework to combat land degradation

42. Tajikistan has undertaken the process of evolving a cohesive strategic framework for economic growth and poverty production. However, the issues of land degradation and their impact on declining agricultural productivity and unemployment and poverty are not reflected in the Interim PRSP. As discussed in an earlier section, it is important that the NFP-CCD collaborates with the policy making organs involved in the PRSP follow up process to ensure that land degradation issues are fully and explicitly reflected in the government's strategy and policy matrix.

43. **To conclude**, *it is not sufficient that Tajikistan adopts a cohesive strategy to combat land degradation that is integrated into PRSP. It is also necessary that the policy and programmatic content of the NAP process be strengthened. Implementation is also affected by weak government structure and* 

<sup>&</sup>lt;sup>19</sup> ADB, Environmental Profile of Tajikistan, Chapter 3.

<sup>&</sup>lt;sup>20</sup> Tajikistan Country Situation Paper, p.40.

institutions. There is duplication of functions among different ministries and state institutions. This blunts the role of policy making. Interrelation and distribution of responsibilities between central and local authorities still needs to be clearly delineated and improved. The participation of civil society also needs to be strengthened. Thus, policy and program implementation need to move forward hand in hand.

# V. Priorities and Programs to Combat Land Degradation

#### A. Priorities of the Government to combat land degradation

44. The NAP focuses on a number of technical issues requiring further research or studies. The main priority areas, or "strategy of actions", could be summarized as follows:

- Creation of information and monitoring system, and a databank on problems of desertification.
- Information centers on the collection and analysis of various categories of degraded lands.
- Researches promoting exact delineation of degraded areas.
- Strengthening of research and survey establishments.
- Creation of a coordination council on desertification.

45. NAP is focused largely on the technical issues relating to getting a better understanding of the dynamics of desertification processes and natural or anthropogenic factors. NAP is relatively weak on dealing with the broader developmental dimension of combating desertification/land degradation. The UNCCD objectives emphasize a more crosscutting and mainstreamed approach to combating desertification. The approach seeks to make efforts to control land degradation an integral part of larger development and poverty reduction strategies and priorities. The NAP does not provide any specific project or program ideas either for technical assistance or investment support. The Domestic Consultant was requested to provide, in consultation with the NFP-CD, a short list of project briefs reflecting the main priority areas. However, no project briefs were received. However, the main priority areas, apart from need for a comprehensive information management and monitoring system, may comprise projects that seek to tackle: (i) water erosion as a result of irrigation, salinization, and water-logging; (ii) overgrazing of pastures, and development of animal fodder and feed; and (iii) felling down of forests for fuel; and intensive cultivation on steep slopes in rainfed areas. The emphasis should be on identifying pilot projects with participatory mode of implementation which are designed to test appropriate design concepts to tackle these problems on a sustainable basis.

#### **B.** Assistance to Tajikistan from external donor agencies.

46. Tajikistan is heavily dependent on external development assistance to sustain its policy reforms as well as to meet the real sector investment needs. However, it faces three main constraints in mobilizing resources: (a) Tajikistan has accumulated a large stock of external debt, amounting to 129 percent of GDP at the end of 2000. Taking into account this fact, the government is committed to strictly limit any increase in its external debt, through a strict discipline on its public investment program;<sup>21</sup> (b) the country's absorptive capacity is limited because of persistent weaknesses in its institutional structures which make effective aid utilization difficult; and (c) the government agencies, including the focal institution for UNCCD, need considerable capacity development support for identification and

<sup>&</sup>lt;sup>21</sup> Tajikistan Government is implementing a three-year (1999-2001) Poverty Reduction and Growth Facility (PRGF) program of the IMF of SDR 96 million (US\$128 million), which calls for tight fiscal and monetary policies and continuous structural reforms.

preparation of projects and programs to access external assistance. The government's priority is to reduce external current account deficit to less than 6 percent of GDP in 2003. Financing of this deficit will require long-term assistance from foreign donors, mainly grants and concessional or close to concessional lending equivalent to more than US\$110 million a year during 2000-2003. The government will limit its issuance of guarantees only to few policy-based lending by multilateral institutions. In order to fulfill the objectives of the poverty reduction strategy, the government is appealing for the support of the international financial organizations and the donor community in the form of grants, technical assistance, as well as program and project financing on concessional terms. At the third Consultative Group (CG) meeting for Tajikistan in May 2001, the total amount pledged by donors reached \$430 million for 2001-2002, reflecting the country's performance on policy reforms. Of this amount, 88 percent was pledged by multilateral funding agencies. The flow of external assistance from the main donor agencies is briefly reviewed below.

#### The World Bank

47. As of July, 2001, the World Bank/IDA commitments to totaled US\$ 261 million for 14 operations (plus three supplemental credits), of which about US\$ 155 million, or about 59%, had been disbursed as of September, 2001, making the World Bank the largest donor agency in Tajikistan. The sectoral composition of the World Bank (IDA) lending is set out in table 3. The bulk of the World Bank lending has been for policy reforms (\$117 million), followed by agriculture (\$97 million). The central objective of the World Bank operations in Tajikistan has been to assist the country on the path of achieving sustainable employment intensive growth. Its projects have focused on post-conflict reconstruction, structural adjustment and poverty reduction. The Bank has also responded to natural disasters and severe drought that hit the country in 2000 and approved a US\$3 million supplement credit to the Farm Privatization Project. In June 2001 the Bank also approved the Second Structural Adjustment Credit in support of the Government's Poverty Reduction Strategy Paper (PRSP).

48. The World Bank's recent Country Assistance Strategy (CAS) focuses on four main areas: (a) *privatization* (the first Structural Adjustment Credit); (b) *farm restructuring and improved agricultural support services* (the Farm Privatization Project, the Rural Infrastructure Rehabilitation project); (c) *social services* (the Education Learning and Innovation Loan, the Primary Health Care Reform Project); and (d) *strengthened institutional capacity for reform implementation at the sector level* (the Second Institution Building Technical Assistance Project). Even though the operations funded by the World Bank may not explicitly refer to the UNCCD, a number of these projects, such as those dealing with poverty reduction, land reforms, rural infrastructure rehabilitation and drought, perhaps do address some aspects of the land degradation issues directly or indirectly. The World Bank has also provided significant non-lending services to Tajikistan - such as public investment program (PIP), notes on poverty, health sector and social sector review, national poverty survey.

(as of July 2	(001)
Sector	Amount US\$ million
Economic Policy	117
Agriculture	93
Urban Development	17
Public Sector Management	12
Social Protection	12
Education	5
Health, Nutrition and Population	5
Total	261
Cumulative Disbursement	155
Percentage Disbursed	59%
Source: World Bank Country Brief for Tajikist	an

Table 4. World Bank Lending to Tajikistan by Sector since 1993(as of July 2001)

# **The Asian Development Bank (ADB)**<sup>22</sup>

49. Since Tajikistan joined ADB in 1998, five loans amounting to \$98.0 million and 19 TAs amounting to \$10.3 million have been approved. The cumulative disbursement was US\$ 22 million (22.4%) as of 31December, 2000. The ADB projects under implementation are focused on Post-conflict Infrastructure Program, Social Sector Rehabilitation, Emergency Flood Rehabilitation, Power Rehabilitation and Road Rehabilitation Project. Starting in 2002, the actual lending level will be determined based on Tajikistan's performance. Under a base case scenario, ADB assistance would be expected to be about \$120 million in 2002-2004. The objectives of the ADB's current Interim Operational Strategy (IOS) are to (i) facilitate the country's transition to a market economy, (ii) assist in the post-conflict rehabilitation and reconstruction, and (iii) support natural disaster rehabilitation, especially roads and power, and (c) the social sector. ADB plans to fund agricultural rehabilitation, farm privatization and mitigating the effects of drought projects during 2001-2004. Table 4 summarizes projects in the advance stage of preparation in the ADB's pipeline, which may be potentially of relevance to addressing land degradation issues.

50. ADB's TA program included support to finalize the national poverty reduction strategy and TA for strengthening the legal and judicial system. The Bank's technical assistance to environmental protection emphasizes (i) environmental legislation and institutional strengthening; and (ii) improved management of water, land, energy, and other natural resources by integrating environmental considerations into projects. It has also provided TA for Capacity Building for Environmental Assessment and Monitoring to help implement the Government's Ecological Program. In the ADB's TA projects, there are three projects, which are somewhat more directly, albeit implicitly, concerned with land degradation issues:<sup>23</sup>

- (i) TA 3319- Flood Disaster Management (approved 12/99-\$ 20500 financed by JSF);
- (ii) TA 3495- Strategy for Improved Flood Management (approved 09/00- \$ 550,000 financed by JSF);
- (iii) TA 3614- Capacity Building for Environmental Assessment and Monitoring to help implement the Government's Ecological Program (approved 12/00, \$600,000 funded by Finland).

	Serial #	Project & Executing Agency	Current Status	
ľ	1.	Capacity Building for Efficient Water Resources Management Ministry of Water Resources and Land Reclamation	Start of Design Stage: 2003	
	2.	Institution Building for Agricultural Sector (irrigation rehabilitation & drainage)	Start of Design Stage: 2004	
		Ministry of Water Resources and Land Redamation		
ſ	3.	Second Water Resources Development and Rehabilitation	Expected approval date	
		Ministry of Water Resources and Land Reclamation	2004	
Source: ADB, Tajikistan Country Strategy and Program Update (2002-2004), August 2001, See Appendix 6 for project briefs.				

Table 5: Projects in ADB's pipeline of potential relevance to addressing land degradation issues

<sup>&</sup>lt;sup>22</sup> ADB, Tajikistan Country Strategy and Program Update (2002-2004), August 2001.

<sup>&</sup>lt;sup>23</sup> ADB, Central Asia: Summary Assessment of ADB Environmental Assistance, prepared by David S. McCauley, August 2002.

# **Global Environment Facility (GEF)**

51. The current project portfolio of GEF includes 3 in Tajikistan and 2 regional projects. However, none of these are related to UNCCD or land degradation, except for the regional project - Water and Environmental Management in the Aral Sea Basin – which though within the focal area of international waters, addresses the issues of land degradation (see Annex 3 for ongoing GEF projects in Tajikistan). It is, however, expected that with the land degradation having been designated as a GEF focal area, the NFP-CD would make effort to identify national projects related to land degradation which would qualify for GEF financing. There is however need for support from donor agencies and GM to assist the Government in these efforts.

# <u>UNDP</u>

UNDP operations focus on three broad areas: good governance and capacity building at the 52. national level; rehabilitation, reconstruction and development, and protection and sustainable management of natural resources.<sup>24</sup> These priorities are addressed through a number of projects implemented in partnership with national counterparts, and key donors to Tajikistan. A notable regional program relates to fiscal decentralization. Initiated at the request of the governments of Central Asia, this project focuses more broadly on Central and Eastern Europe and the Commonwealth of Independent States, and seeks to build capacities by creating and developing a network of experts from Central and Eastern Europe with governmental officials and non-governmental actors in Central Asia. The project brings together these participants in a variety of workshops, where regional papers are prepared and presented by the four country teams from Kazakhstan, Kyrgyzstan, Uzbekistan, and Tajikistan, sharing experience and enhancing cooperation. The project designed by the World Bank, OSI, UNDP and the Czech Trust Fund, starting in 2001 and ending in 2003. The UNDP has assisted the Government of Tajikistan in fulfilling its obligations under the Rio Conventions. It had assisted with the preparation of the NAP-UNCCD and has more recently assisted Tajikistan with the preparation of the National Strategy and Action Plan on Biodiversity Conservation, and to enable Tajikistan to prepare its First National Communication to the Conference of the Parties of the UN Framework, focusing on greenhouse gas emissions and climate change. It current operations, however, are not related directly to support activities to combat desertification.

# Support to UNCCD implementation from SPA partners

53. Germany (GTZ) is providing support, under the Strategic Partnership Agreement framework, through the GTZ-CCD-Project: "Support of selected Pilot-Projects for poverty alleviation and combating desertification in Central-Asia". In a mission to Tajikistan in May 2003, the CCD Project of GTZ consulted the NFP to identify an appropriate project and location, that address NAP priorities for financing.

54. Canada's contribution to the SPA partnership will focus on the synergy between climate change and desertification through funding opportunities presented by the South Europe/Central Asia Climate Change Support Fund, especially in the areas of adaptation to the adverse effects of climate change and carbon sequestration. Pilot projects for this purpose are yet to be identified in Tajikistan.

55. ICARDA is also expected to join SPA. It is supporting a number of agricultural research activities in the CARs. For instance, ICARDA has taken special initiatives towards crop diversification for sustainable agricultural development in Central Asia and the Caucasus. A number of crops are being promoted in the region, such as potato, soybean, cowpea, rice, maize, safflower, sunflower, rapeseed and

<sup>&</sup>lt;sup>24</sup> UNDP in Tajikistan on the UNDP web-site.
alfa-alfa. In this context, new germplasm has been arranged from different countries and international centers. Some of the varieties of these crops have been made available to the collaborating research institute to Tajikistan among the CARs. As part of another collaborative initiative between ICARDA, CIMMYT and German Agro Action, Khojent region of Tajikistan, known for seed production of cereals, received seeds of barley, durum wheat, food and forage legumes, as well as seeds of winter wheat for on-farm trials and field demonstrations.<sup>25</sup>

56. According to the GM-FIELD data base, Switzerland has provided support to Tajikistan for Lake Sarez Risk Mitigation Project to the tune of US\$3, 283,290.

57. **To conclude**, the preceding review shows that a number of donors and IFIs have been engaged in assisting Tajikistan with its development and reform efforts. Some of their assistance has assisted projects and programs which indirectly address land degradation concerns, though it is not possible to quantify how much of external assistance flows can be attributed to CCD/NAP implementation. Thus, a case could be made for a more direct and conscious assistance to CCD/NAP. This issue will be discussed further in Part VI.

#### C. Support for sub-regional/regional programs to combat land degradation

58. A number of donor agencies have provided technical assistance to strengthen regional cooperation in areas of relevance to UNCCD. For instance, the World Bank, GEF, UNDP and TACIS are involved in the Aral Sea Basin Program. The ADB has provided RETA for the 'Promotion of Renewable Energy, Energy Efficiency and Greenhouse Gas Abatement Projects' (PREGA). ADB has also provided regional TAs (RETAs) to support the preparation of the Regional Environment Action Plan (REAP) for Central Asia, and the Regional Strategy and Action Plan for Sustainable Mountain Area Development in Central Asia. USAID has under implementation a Central Asia Natural Resources Management Project (NRMP) to promote greater regional cooperation in the management of Central Asia's water, energy and land resources. UNDP Regional Aral Sea Basin Capacity Building Project has played a key role in the establishment and promotion of regional cooperation under the Inter-state Commission on Sustainable Development (ISDC) umbrella. The project has provided the resources necessary for ISDC activities. This Project has now been completed and leaves a vacuum in terms of support for the ISDC. The Swiss have been assisting the CARs through a "Central Asian Mountain Partnership (CAMP) - a long term programme of the Swiss Agency for Development and Cooperation (SDC) implemented by the Center for Development and Environment (CDE) of the University of Berne. There are number of other donor agencies involved with supporting various regional cooperation initiatives. As listed in Annex 3, GEF has in its portfolio two regional projects, which also include Tajikistan.

59. The REAP for Central Asia lists for regional cooperation a project on "Organization and support of the regional network of stationary posts for desertification monitoring, with the participation of Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and Turkmenistan". In the context of Tajikistan interstate coordination with Uzbekistan and Turkmenistan is important to resolve shared problems of water, energy and pasture utilization.

<sup>&</sup>lt;sup>25</sup> CAC (CGIAR Collaborative Research Program for Central Asia and the Caucasus) News - January-March 2002 & October-December 2001 Issues, PFU, Tashkent.

#### VI. Issues & Opportunities in implementing UNCCD in Tajikistan

#### A. Obligations to support UNCCD/NAP under the Convention

60. This Part pulls together the main conclusions from the extensive review and discussion in the preceding Parts on the progress, problems and the issues constraining effective implementation of the UNCCD in Turkmenistan. The conclusions are organized in the form of issues that need particular focus and the opportunities which exist to further enhance the progress in effective implementation of the UNCCD at the national and regional levels. The conclusions have been framed against the overarching perspective of the cross-cutting and participatory approach and the obligations of both the developing and developed member countries set out in the Convention to Combat Desertification (CCD) - see Box 1 The Convention obligates the affected countries not only to prepare NAPs but also take effective steps, including provision of appropriate budgetary resources, for the implementation of the activities and projects in the NAP to combat desertification. It also obligates the developed country parties to assist the developing countries in these efforts.

Conclusion no. 1: The Government of the Tajikistan Republic attaches priority to the implementation of the UNCCD. It is recognized that the NAP implementation is held up partly because the Government's budgetary stringency has affected its ability to provide adequate funding for the NAP activities. Notwithstanding prevailing tight budgetary situation, the Government has an obligation under the CCD to provide appropriate resources for the implementation of the Convention. This situation needs to be reviewed at senior levels by the Government to make necessary financing from domestic resources available for the priority programs to combat desertification. As for the development partners, they are supportive of the Tajik PRSP. There is a close nexus between land degradation and poverty. Poor people are highly dependent on natural resources for their livelihood and are most affected by environmental degradation, contamination of water sources and outcome of natural disasters including droughts and floods. It is therefore important that policy makers involved in the PRSP process duly factor in the economic impact of land degradation in making their aid allocation decisions in support of macro-economic and sectoral strategies spelt out in the Tajik PRSP. There is a strong rationale for the multilateral and bilateral donors, consistent with their obligations under the UNCCD, to finance activities which are directly or indirectly supportive of UNCCD objectives through a conscious support to the Convention through the NAP framework. This might provide a good entry point to help trigger policy dialogue on policy issues which relate to sustainable management of natural resources and environment in Tajikistan.

Box 1: UNCCD - Approach and Obligations of the Parties

#### Approach

Combating desertification is essential to ensuring the long-term productivity of inhabited drylands. Desertification occurs because dryland ecosystems are extremely vulnerable to over-exploitation and inappropriate land use. This Convention aims to promote effective action through innovative national and local programmes and supportive international partnerships. Drawing on past lessons, the Convention states that these programmes must adopt a democratic, bottom-up approach. They should emphasize popular participation and the creation of an "enabling environment" designed to allow local people to help themselves to reverse land degradation. Of course, governments remain responsible for creating this enabling environment. They must make politically sensitive changes, such as decentralizing authority, improving land-tenure systems, and empowering women, farmers, and pastoralists. They should also permit non-governmental organizations to play a strong role in preparing and implementing the action programmes. In contrast to many past efforts, these action programmes are to be fully integrated into other national policies for sustainable development. They should be flexible and modified as circumstances change. The need for coordination among donors and recipients is stressed because each programme's various activities need to be complementary and mutually reinforcing.

Desertification is primarily a problem of sustainable development. It is a matter of addressing poverty and human well-being, as well as preserving the environment. Social and economic issues, including food security, migration, and political stability, are closely linked to land degradation and drought. So are such environmental topics as climate change, loss of biological diversity, and freshwater supplies. The Convention emphasizes the need to coordinate research efforts and action programmes for combating desertification with these related concerns.

#### Obligations

By acceding to the CCD, a State becomes a Party to the main international instrument dealing with the urgent global problem of land degradation.

There are four principal categories of obligation under the terms of the CCD and its regional implementation annexes:

- The common obligation of all Parties, including those unaffected by desertification, are spelled out mainly in articles 3, 4, 12, 14, 16, 17, 18, 19 and 20. They relate principally to international cooperation in implementing the CCD at all levels, particularly in the areas of the collection, analysis and exchange of information, research, technology transfer, capacity building and awareness building, the promotion of an integrated approach in developing national strategies to combat desertification, and assistance in ensuring that adequate financial resources are available for programmes to combat desertification and mitigate the effects of drought.

- Country Parties affected by desertification in Africa, Asia, Latin America and the Caribbean, and the Northern Mediterranean undertake to prepare national action programmes and to cooperate at the regional and subregional levels.

- Other affected country Parties have the option of preparing action programmes following Convention guidelines, or more generally of establishing strategies and priorities for combating desertification.

- Developed country Parties have, under article 6, article 20 and other articles, specific obligations to support affected countries (particularly but not exclusively affected developing countries) by providing financial resources and by facilitating access to appropriate technology, knowledge and know-how.

- Parties are obligated (article 26) to report on measures they have taken to implement the Convention. Parties which have prepared National Action Programmes are obliged under article 10 to provide regular progress reports on their implementation.

## B. Improving the understanding of the underlying root causes of land degradation

61. "Land degradation" is a complex phenomenon involving reduction or loss of biological or economic productivity of arable lands or capacity of pastures, forests and forest blocks under the impact of natural or anthropogenic factors. Land degradation is triggered off by erosion, overgrazing, salinization, and pollution. The Tajikistan NAP discusses a number of areas, which need deeper study or investigation. Considering the funding constraints, it is suggested that priority should be established on the basis of criteria, which give preference to down-stream areas of applied research or study with value-added for efficient resource conservation. It is recommended that the following priority areas require TA support for research or study on pilot basis:

- information and monitoring systems for water and wind erosion processes, trends in deforestation and degradation of pastures;
- land degradation because of intensive agriculture on steep slopes and pilot testing of approaches for rational land use on slopes;
- Risk assessment of safety of water reservoirs and strategies to strengthen governments capacity for management of natural disaster emergencies from floods, landslides and mudflows;
- salinization control and techniques to use secondary saline water for agriculture;

**Conclusion no. 2:** Tajikistan has excellent expertise to carry out technical and scientific studies, though its research capabilities in recent years have been affected by lack of equipment and

facilities in the research infrastructure, and limited exposure of its experts to the research institutions in other countries working on similar problems. It is also important that such research priorities and their design takes into account not just the biophysical dimension of a particular problem, but also gives due consideration to factors such as participation of the intended beneficiaries, the institutional feasibility, and some estimation of the benefit cost relationship in reviewing alternative priorities competing for scarce resources.

## C. Institutional factors constraining implementation of NAP

62. As discussed earlier, implementation of NAP is constrained by its weak policy and program content, and by institutional weaknesses. There are three basic institutional constraints to the implementation of NAP:

- (a) Although NAP in Tajikistan was officially approved by a decision of the Government, its implementation is still handicapped by the budgetary constraints faced by the government, which has puts on hold many of the strategies for action discussed in the NAP.
- (b) The implementation process of NAP is not sufficiently mainstreamed to the policymaking organs and processes, such as the PRSP process, coordinated with other concerned government ministries, and decentralized to the local government authorities. It lacks the mechanisms and funds to promote participatory approaches for active involvement of the NGOs and Civil Society stakeholders.
- (c) The NFP does not have adequate equipment, staff or resources, and lacks the capacity building support to have a meaningful interaction with the international donor community or to prepare program proposals to access funding support from these agencies.

63. The corrective actions to overcome the above constraints no doubt rest with the Government of the Republic of Tajikistan. However, the GM and its SPA partners may consider pump-priming these actions through policy dialogue, coupled with funding support to strengthen the capacity of the NFP and of the Focal Institution.

#### Conclusion no. 3:

- (i) It is suggested that the Government takes necessary decisions to strengthen the institutional framework responsible for implementation of the CCD. For this purpose, the office of the NFP needs to be strengthened to host the information center on desertification control.
- (ii) The Tajikistan administrative structure has faced frequent reorganization, which may require a review of the composition of the National Coordination Body. It would be useful to include the NFPs of the other two Rio Conventions and NEAP on this body and also to have representation of the key officials responsible for steering the PRSP process. This would facilitate mainstreaming NAP into the Poverty Reduction Strategy and the national budgetary and planning process of Tajikistan.
- (iii) There is duplication of functions among different ministries and state institutions. This blunts the role of policy making. Interrelation and distribution of responsibilities between central and local authorities need to be clearly delineated and improved. The participation of civil society also needs to be strengthened.

- *(iv) Capacity building support is urgently needed to strengthen the capacity of the NFP and of the Focal Institution in the following areas:* 
  - Program development, such as preparation of concept notes and project proposals relating to addressing land and water degradation in order to approach potential donor agencies, including GEF.
  - Sensitization training in cross-cutting concerns such as participatory approaches, gender issues, and sustainable development.

## D. Policy and legislation related constraints

64. The Government has a demonstrated a positive policy stance in favor of reforms and actively participated along with the development partners in the PRSP process. However, the country faces certain basic constraints, such as high level of external debt requiring tight discipline on the size of its public investment program (PIP). This would affect even urgent real sector investments, including those impacting on its efforts to combat desertification. These constraints can only be overcome through increased levels of external assistance with a high component of grant assistance. However, even if aid commitments are readily forthcoming, their speedy utilization may be constrained by weak management capacity. The government still has a large unfinished policy agenda summarized in the Policy Matrix attached to the I-PRSP (see Annex 2). From the perspective of implementing the UNCCD, the current policy agenda does not adequately reflect the concerns relating to combating land degradation. Although the PRSP does not specifically mention the UNCCD, it notes that environmental protection, production of sustainable energy and disaster prevention are an integral part of the poverty reduction strategy.

65. The legislative changes are an evolving process and emphasis needs to be placed not merely on promulgating new laws, but equally on strengthening the compliance and enforcement of the existing legislation, plugging the loopholes, which dilute strict enforcement. Another critical area is the need to harmonize different laws to avoid overlapping jurisdictions, or inherent contradictions. From the perspective of UNCCD, particular attention needs to be paid to the issues of land and water user rights and regulating the functioning of participatory mechanisms, such as water users associations and credit unions. The laws are often too generic, or too loosely framed, as to make compliance difficult in the absence of authoritative interpretation, or detailed byelaws or regulations.

**Conclusion no 4:** It is important that the Focal Institution for UNCCD and its national coordination body (NCB) are proactive in articulating the policy issues which impact on the implementation of the UNCCD and how these could be reflected in the implementation of the Tajikistan PRSP. Two types of issues need particular attention: (a) policy issues which are covered by need to strengthen environment management and administration to promote sustainable use of natural resources, including better maintenance of environmental assets and infrastructure with special attention to arable lands and water storage, distribution and drainage networks; (b) policy issues relating to sustainable agricultural development. Some of the key issues in this context are discussed in Section E and F of Part IV. However, an overarching constraint to the success of policy dialogue is signified by the following statement in the Tajik PRSP: "Funds allocated from the State budget for environmental protection do not cover even essential nature protection measures, and currently there are no other alternative sources of illustration:

- Agricultural reforms require acceleration of restructuring in agriculture, transfer of state agricultural assets into private hands, and encouragement of initiatives and investments in the rural infrastructure.
- Addressing issues of salinization, soil erosion, overgrazing and water conservation in the context of their impact on declining agricultural productivity.
- Amending procedures and institutional arrangements at the national and district levels with the purpose to ensure fair and well-organized transfer of land and other assets of agricultural farms to individuals or groups of individuals.

## E. Constraints to effective program development and implementation

66. There are basically two types of constraints: those of institutional and capacity weaknesses, and those due to financing constraints. The main constraints are common to all the Central Asian Countries. These may be summarized as follows:

- The NAP is thin on policy and program content, with little attention to investment needs in sectors such as agriculture, irrigation or drainage, or land reclamation.
- Reliance on "stand alone" projects or activities aimed at combating desertification, rather than incorporating these activities as components of cross-sectoral programs of ministries, such as Agriculture, Livestock, Water Resources or Forestry.
- Issues such as soil erosion, salinization, water logging, wind erosion, or loss of vegetative cover need more comprehensive and cross-cutting approach requiring involvement of a number of agencies. Most agencies, however, work as enclaves concerned with their own mandates and budgets. This causes different ministries to work in isolation and at times at cross purposes.

67. The approach to tackle these constraints has been discussed in Section C. Effective program development and implementation may involve actions somewhat along the following lines:

- (i) There appears to be urgent need to strengthen capacity in the concerned agencies to prepare project concepts and develop them into more detailed project documents. Also the Focal Institution and other concerned agencies need to develop translation facilities from Russian so that the project proposals can be submitted in English to the interested donor agency missions for there consideration.
- (ii) The Focal Institution and the NFP should also be in a position to leverage other agencies' programs to address land degradation concerns by providing them with substantive advice or concrete written proposals to incorporate in the project design. This would be particularly relevant in order to influence the programs/projects in the pipelines of IFIs, which are in an early design stage.

68. **Accessing External Resources.** It is important to realize that the Focal Institution needs to have a credible program of projects, including pilot projects, to combat land degradation. Such a program, both for technical assistance and investment projects, must be mainstreamed into domestic budgetary and PIP processes, must be consistent with the PRSP framework, and should have necessary internal Government clearances.<sup>26</sup> Preferably and to the extent possible, some budgetary resources should be made available to

<sup>&</sup>lt;sup>26</sup> An Aid Coordination Unit (ACU) within the Executive office of the President has been recently set up to be responsible for management, coordination and monitoring of the use of external aid. Development of appropriate database is planned to manage aid flows, which would be compatible with the PIP. It's also expected that the ACU will be preparing annual reports on foreign aid and its utilization.

meet a part of the local costs, as this would convey an indication of Government's commitment and ownership of the projects and activities for which external financing is being sought.

69. According to the Government's PRSP, the total financing needs for the implementation of the PRSP action program has been projected at US\$688 million, of which domestic resources would provide for \$146 million and external financing would be needed to the amount of \$542 million. The current external aid commitments are estimated at \$371 million, leaving need for additional external resources of \$171 million. The time frame for this projection was 2002-2004, but more realistically it would be stretched to cover a longer medium term. The sectoral breakdown of the PRSP financing needs is set out in the following table 6.

#### Table 6.

Sector	Available External	Costs requirements				
	finance	External	Domestic	Total		
Public administration	1,322	3,728	258	3,986		
Social protection		70,611	37,981	108,592		
Multi-sector social services	55,000	43,800	14,000	57,800		
Education	5,000	43,263	19,673	62,936		
Health	25,412	27,647	8,726	36,373		
Agriculture	118,140	127,100	18,840	145,940		
Privatization, labor, private sector development.	3,985	14,909	2,105	17,015		
Energy	58,300	61,520	17,780	79,300		
Transport	74,000	83,000	21,000	104,000		
Telecommunications	15,000	23,049	1,191	24,240		
Water supply	15,000	40,105	4,205	44,310		
Environment and tourism		3,415	38	3,453		
Total	371,247	542,147	145,797*	687,944		

Summary of the costs and financing of the PRSP action program (USS thousand)

70. Thus, the financing of the Tajik CCD-NAP associated projects and activities will have to be found within the have overall framework and possibly adjusted against the sectors, such as agriculture, environment and multi-sector social services over a 5-year time frame.

**Conclusion no. 5:** *Considering that financing is a crucial constraint to the implementation of the CCD, a three step approach is needed to approach the issue of resource mobilization:* 

- (i) Prepare outlines of a credible program of cross-cutting projects and activities, with necessary internal Government clearances within the PRSP medium-term financing framework.
- (ii) Identify the more immediate technical assistance needs targeted at urgent institutional strengthening and capacity building needs of the Focal Institution and other concerned agencies, including some pilot projects responding to local level community based initiatives.
- (iii) Undertake policy dialogue with international development partners within the PRSP coordination mechanism, supplemented by bilateral contacts to firm up specific donor commitments.

## F. The possibilities of greater GEF involvement in land degradation

71. A new window of opportunity has opened with the amendment to the GEF Instrument "to designate land degradation, primarily desertification and deforestation, as a focal area, as a means of enhancing GEF support for the successful implementation of the UN Convention to Combat Desertification." In order to avail of this opportunity, however, the NFP would need to work with other ministries or agencies to identify and build a pipeline of projects which may qualify for GEF financing. This basically implies projects which also address global environmental issues and include cofinancing from domestic and/or external sources in addition to GEF financing. In this context, GEF draft OP-15, which was considered by the recent GEF Council session in May 2003, states that "GEF assistance would focus on funding the agreed incremental costs of accelerating country-driven actions on sustainable land management to preserve ecosystem stability, functions, and services; reduce carbon dioxide emission and improve carbon sequestration; or stabilize sediment storage and release in waterbodies". GEF assistance would cover three inter-related types of interventions – capacity building, on-the-ground investments, and targeted research – at the community, national, and/or transboundary levels.

72. Tajikistan may be able to get from GEF "enabling activity" grant for land degradation focal area, as it has obtained for "Expedited Financing of Climate Change Enabling Activities"-see Annex 3. ADB, as the GEF executing agency, could also be approached for assistance on the lines of its umbrella program for China.<sup>27</sup> Any assistance in terms of technical and funding support from interested donors to the Government of Tajikistan for identification of GEF-able project concepts (both national and regional) would be most useful in stimulating implementation of UNCCD.

73. As discussed in an earlier section, in order to promote synergies between the CCD and the other environmental conventions, the concerned government focal institutions need to develop joint work programs to address land degradation and deforestation to achieve multiple global benefits, including poverty alleviation, and preservation of ecosystem stability, functions, and services such as soil and watershed protection, carbon uptake and storage, water purification, climate regulation; and nutrient retention.<sup>28</sup> Strengthening the programmatic content of the **Joint Work Programs** would catalyze collaborative activities around concrete action areas. Mere emphasis on establishing formal administrative mechanism, important as they are, would not be a sufficient condition to promote synergies. *For this purpose, it is suggested that the Government may constitute a Working Group of the NFPs of the UNCCD, Biodiversity, Convention, Climate Change, NEAP and GEF, which may meet periodically to promote mutual collaboration.* 

**Conclusion no. 6:** In order to promote synergies between the CCD and the other environmental conventions, the concerned government focal institutions need to develop joint work programs to address land degradation and deforestation to achieve multiple global benefits. For this purpose, it is suggested that the Government may constitute a Working Group of the NFPs of the UNCCD, Biodiversity, Convention, Climate Change, NEAP and GEF, which may meet periodically to promote mutual collaboration. Tajikistan also may be able to get from GEF "enabling activity" grant for land degradation focal area, as it has obtained for "Expedited Financing of Climate Change Enabling Activities". Any assistance in terms of technical and funding support from interested donors to the Government of Tajikistan for identification of GEF-able project concepts (both national and regional) would be most useful in stimulating implementation of UNCCD.

<sup>&</sup>lt;sup>27</sup> PDF-B Grant: PRC/GEF Partnership on Land Degradation in Dryland Ecosystems – Multiple Focal Areas/OP 12 on Integrated Ecosystems Management.

<sup>&</sup>lt;sup>28</sup> GEF draft OP # 15 emphasizes such joint work programs.

## G. Forging strategic partnership among donors and domestic stakeholders

74. The Strategic Partnership Agreement (SPA) between the GM, ADB, Germany and Canada, with anticipated joining of Switzerland, IFAD and ICARDA, offers new opportunities to enhance the implementation of NAPs and promote regional cooperation among CARS. Vigorous follow up of the outcomes of current RETA would provide the concrete instruments to forge strategic partnerships among donors and domestic stakeholders and also provide a coherent platform for the mobilization of resources for UNCCD in Central Asia.

#### Annex 1

		1996	IRONMENTA 1997	1998	1999	2000	
A.	Income and Growth						
	1. GNP per Capita (\$, current)	340	330	370	-	-	
	2. GDP Growth (% constant prices)	(4.4)	1.7	5.3	3.7	8.3	
	a. Agriculture & Forestry	-	0.2	6.5	3.8	12.4	
	b. Industry & Construction	-	(2.0)	8.1	5.0	10.3	
	c. Services	-	-	-	-	-	
B.	Money and Inflation	(annual percentage change)					
	1. Consumer Prices (end of period)	40.6	159.8	2.7	31.3	60.6	
	2. Broad Money (M2)	93.2	121.2	23.9	37.0	53.1	
C.	Government Finance		(percent of GDP)				
	Overall Surplus/Deficit (-)	(5.8)	(3.3)	(3.8)	(3.1)	(0.6)	
D.	Balance of Payments	× /	~ /	× /			
-	1.Merchand Trade Balance (% of GDP)	(1.5)	(5.8)	(11.2)	(2.6)	(4.9)	
-	2.Current Account Balance(% of GDP)	(7.4)	(5.4)	8.8	(3.4)	(5.7)	
E.	External Payments Indicators		· · ·			, ,	
	1. Gross Official Reserves (\$ million)	14.0	30.0	65.0	41.0	87.0	
	(months of Imports)	0.3	0.6	1.5	1.7	2.4	
	2. External Debt Service(% of exports)	34.4	10.7	6.8	5.1	7.7	
	3. External Debt Service(%of GDP)	83.8	108.0	90.0	116.0	126.0	
	SOCIAL &	ENVIRONM	IENTAL INDIC	CATORS			
	Selected Social Indicators		1985	1990	Latest Ye		
	pulation (million)		1985 4.6	5.3	6.2 (200	0)	
Annual	pulation (million) Population Growth Rate (% change over pre		4.6	5.3 3.0	6.2 (200 1.6 (199	0) 9)	
Annual I Infant M	pulation (million) Population Growth Rate (% change over pre ortality Rate (below 1 year per thousand liv		4.6 - 38.9 (1999)	5.3	6.2 (200 1.6 (199 20.0 (199	0) 9) 9)	
Annual I Infant M Adult Li	pulation (million) Population Growth Rate (% change over pre ortality Rate (below 1 year per thousand liv teracy (%)		4.6 - 38.9 (1999) 97.7 (1989)	5.3 3.0 40.6 (1991) -	6.2 (200 1.6 (199 20.0 (199 97.7 (199	0) 9) 9) 9)	
Annual I Infant M Adult Li Percent	pulation (million) Population Growth Rate (% change over pre ortality Rate (below 1 year per thousand liv teracy (%) of population below the poverty line		4.6 - 38.9 (1999) 97.7 (1989) 30.0 (1989)	5.3 3.0 40.6 (1991) - -	6.2 (200 1.6 (199 20.0 (199 97.7 (199 82.6 (199	0) 9) 9) 9) 9) 9)	
Annual I Infant M Adult Li Percent o Populati	pulation (million) Population Growth Rate (% change over pre ortality Rate (below 1 year per thousand liv teracy (%) of population below the poverty line on with access to safe water (%)	e births)	4.6 - 38.9 (1999) 97.7 (1989) 30.0 (1989) -	5.3 3.0 40.6 (1991) - - -	6.2 (200 1.6 (199 20.0 (199 97.7 (199 82.6 (199 60.0 (199	0) 9) 9) 9) 9) 9) 9)	
Annual I Infant M Adult Li Percent Populati Public E	pulation (million) Population Growth Rate (% change over pre ortality Rate (below 1 year per thousand liv teracy (%) of population below the poverty line on with access to safe water (%) xpenditure for Social Services (as a % of G	e births)	4.6 - 38.9 (1999) 97.7 (1989) 30.0 (1989) - - -	5.3 3.0 40.6 (1991) - - - -	6.2       (200         1.6       (199         20.0       (199         97.7       (199         82.6       (199         60.0       (199         6.4       (200	0) 9) 9) 9) 9) 9) 9) 0)	
Annual I Infant M Adult Li Percent Populati Public E	pulation (million) Population Growth Rate (% change over pre ortality Rate (below 1 year per thousand liv teracy (%) of population below the poverty line on with access to safe water (%)	e births)	4.6 - 38.9 (1999) 97.7 (1989) 30.0 (1989) -	5.3 3.0 40.6 (1991) - - - - 0.620 (1992)	6.2 (200 1.6 (199 20.0 (199 97.7 (199 82.6 (199 60.0 (199	0) 9) 9) 9) 9) 9) 9) 0)	
Annual I Infant M Adult Li Percent Populati Public E Human I	pulation (million) Population Growth Rate (% change over pre ortality Rate (below 1 year per thousand liv teracy (%) of population below the poverty line on with access to safe water (%) xpenditure for Social Services (as a % of G Development Index Development Ranking	e births)	4.6 - 38.9 (1999) 97.7 (1989) 30.0 (1989) - - -	5.3 3.0 40.6 (1991) - - - 0.620	6.2       (200         1.6       (199         20.0       (199         97.7       (199         82.6       (199         60.0       (199         6.4       (200	0) 9) 9) 9) 9) 9) 9) 9) 0) 99)	
Annual I Infant M Adult Li Percent Populati Public E Human I Human	pulation (million) Population Growth Rate (% change over pre ortality Rate (below 1 year per thousand liv teracy (%) of population below the poverty line on with access to safe water (%) xpenditure for Social Services (as a % of G Development Index Development Ranking Selected Environmental Indicators	e births)	4.6 - 38.9 (1999) 97.7 (1989) 30.0 (1989) - - - -	5.3 3.0 40.6 (1991) - - - - 0.620 (1992)	6.2         (200           1.6         (199           20.0         (199           97.7         (199           82.6         (199           60.0         (199           6.4         (200           0.601         (19	0) 9) 9) 9) 9) 9) 9) 9) 0) 99)	
Annual I Infant M Adult Li Percent Populati Public E Human I Human I Total Fo	pulation (million) Population Growth Rate (% change over pre- ortality Rate (below 1 year per thousand liv teracy (%) of population below the poverty line on with access to safe water (%) xpenditure for Social Services (as a % of G Development Index Development Ranking Selected Environmental Indicators rest Area (thousand hectares)	e births) DP)	4.6 - 38.9 (1999) 97.7 (1989) 30.0 (1989) - - - -	5.3 3.0 40.6 (1991) - - - - 0.620 (1992)	6.2       (200         1.6       (199         20.0       (199         97.7       (199         82.6       (199         60.0       (199         6.4       (200         0.601       (19         110       (19         420       (19	0) 9) 9) 9) 9) 9) 9) 0) 99) 99) 99)	
Annual I Infant M Adult Li Percent Populati Public E Human I Human I Total Fo	pulation (million) Population Growth Rate (% change over pre- ortality Rate (below 1 year per thousand liv teracy (%) of population below the poverty line on with access to safe water (%) xpenditure for Social Services (as a % of G Development Index Development Ranking Selected Environmental Indicators rest Area (thousand hectares) rsity: National protected area (thousand ha)	e births) DP)	4.6 - 38.9 (1999) 97.7 (1989) 30.0 (1989) - - - - - -	5.3 3.0 40.6 (1991) - - - 0.620 (1992) 97 (1992)	6.2         (200           1.6         (199           20.0         (199           97.7         (199           82.6         (199           60.0         (199           6.4         (200           0.601         (19           110         (19           420         (19           587         (19	0) 9) 9) 9) 9) 9) 0) 99) 99) 99) 99) 99)	
Annual ] Infant M Adult Li Percent Populati Public E Human ] Human ] Total Fo <b>Biodive</b>	pulation (million) Population Growth Rate (% change over pre- ortality Rate (below 1 year per thousand liv teracy (%) of population below the poverty line on with access to safe water (%) xpenditure for Social Services (as a % of G Development Index Development Ranking Selected Environmental Indicators rest Area (thousand hectares) rsity: National protected area (thousand ha) As a % of Land Area	e births) DP)	4.6 - 38.9 (1999) 97.7 (1989) 30.0 (1989) - - - - - - - - - -	5.3 3.0 40.6 (1991) - - - 0.620 (1992) 97 (1992) 410	6.2       (200         1.6       (199         20.0       (199         97.7       (199         82.6       (199         60.0       (199         6.4       (200         0.601       (19         110       (19         420       (19         587       (19         4.2       (19	0) 9) 9) 9) 9) 9) 9) 0) 99) 99) 99) 99)	
Annual ] Infant M Adult Li Percent Populati Public E Human ] Human ] Total Fo <b>Biodive</b>	pulation (million) Population Growth Rate (% change over pre- ortality Rate (below 1 year per thousand liv teracy (%) of population below the poverty line on with access to safe water (%) xpenditure for Social Services (as a % of Gi Development Index Development Ranking Selected Environmental Indicators rest Area (thousand hectares) rest Area (thousand hectares) rest Y: National protected area (thousand ha) As a % of Land Area Se: Cropland (thousand ha)	e births) DP)	4.6 - 38.9 (1999) 97.7 (1989) 30.0 (1989) - - - - - - - - - - - - -	5.3 3.0 40.6 (1991) - - - 0.620 (1992) 97 (1992) 410 -	6.2       (200         1.6       (199         20.0       (199         97.7       (199         82.6       (199         60.0       (199         6.4       (200         0.601       (19         110       (19         420       (19         587       (19         846       (19	0) 9) 9) 9) 9) 9) 9) 99) 99) 99) 99) 99)	
Annual 1 Infant M Adult Li Percent Populati Public E Human 1 Human 1 Total Fc <b>Biodive</b>	pulation (million) Population Growth Rate (% change over pre- ortality Rate (below 1 year per thousand liv teracy (%) of population below the poverty line on with access to safe water (%) xpenditure for Social Services (as a % of Gl Development Index Development Ranking Selected Environmental Indicators rest Area (thousand hectares) rest Area (thousand ha) As a % of Land Area se: Cropland (thousand ha) Permanent Pastures (thousand ha)	e births) DP)	4.6 - 38.9 (1999) 97.7 (1989) 30.0 (1989) - - - - - - - - - - - - -	5.3 3.0 40.6 (1991) - - - 0.620 (1992) 97 (1992) 410 -	6.2       (200         1.6       (199         20.0       (199         97.7       (199         82.6       (199         6.0       (199         6.4       (200         0.601       (19         110       (19         420       (19         587       (19         846       (19         3,300       (19	0) 9) 9) 9) 9) 9) 9) 99) 99) 99) 99) 99)	
Annual ] Infant M Adult Li Percent Populati Public E Human ] Human ] Total Fc <b>Biodive</b> Land U	pulation (million) Population Growth Rate (% change over pre- ortality Rate (below 1 year per thousand liv teracy (%) of population below the poverty line on with access to safe water (%) xpenditure for Social Services (as a % of Gi Development Index Development Ranking Selected Environmental Indicators rest Area (thousand hectares) rest Area (thousand hectares) rest Y: National protected area (thousand ha) As a % of Land Area Se: Cropland (thousand ha)	DP)	4.6 - 38.9 (1999) 97.7 (1989) 30.0 (1989) - - - - - - - - - - - - -	5.3 3.0 40.6 (1991) - - - 0.620 (1992) 97 (1992) 410 - -	6.2       (200         1.6       (199         20.0       (199         97.7       (199         82.6       (199         6.0       (199         6.4       (200         0.601       (19         110       (19         420       (19         587       (19         846       (19         3,300       (3,741	0) 9) 9) 9) 9) 9) 9) 99) 99) 99) 99) 99)	

# ECONOMIC, SOCIAL and ENVIRONMENTAL INDICATORS

# Tajikistan: Policy Matrix, 2000-2003

Structural Policy Measures				
A. Fiscal policy and Institutions				
1. Phase out the sales taxes for cotton and aluminum.	2001-2002			
2. Review excise taxes with a view to improve revenue performance 2001	2001			
3. Streamline and prioritize the Public Investment Program 2000	2000			
4. Increase the share of social spending in the 2001 budget 2001	2001			
5. Ensure timely payment of government wages, and pensions.	Continuous			
6. Improve tax administration by:	2000 2001			
<ul><li>(i) strengthening Large Taxpayers Inspectorate;</li><li>(ii) increasing use of asset seizure and the bankruptcy law to enforce tax payments;</li></ul>	2000-2001 2000-2001			
(iii) implementing the VAT reform, including staff training;	2000-2001			
(iv) completing the computerization of the STC; and	2000-2001			
(v) eliminating automatic taxation through banks' settlement accounts for all enterprises.	2000			
B. Social spending	2000			
1. Implement a program of providing allowances to the poorest 20 percent school children based on				
community targeting.	2001			
2. For the health sector:	2000-2003			
(i) rehabilitate 200 health facilities in the rural area	2001-2002			
(ii) implement a comprehensive program of health service reform in 8 pilot districts;	2002			
(iii) reform the health sector to channel resources to improve primary health care				
3. For the education sectors				
(i) rehabilitate 220 schools.	2000-2001			
(ii) retrain 10,000 teachers in active learning methods. 2001	2001			
(iii) provide basic education materials free of charge to the poor. 2002	2002			
(iv) introduce clear and explicit rules for student fees, with financial support for poor students based	2002			
on needs and performance.	2000 2002			
(v) reform the secondary school system to improve its quality and adaptability to the needs of the	2000-2003			
market economy.				
4. Rehabilitate the pension system by:				
(i) increasing the age for pension eligibility by 6 months each year;	2000-2003			
(ii) freezing working pensioners' benefits; 2001–2002	2001-2002			
(iii) developing a detailed plan and strategy for pension reform that includes the introduction of	2001 2002			
individual retirement accounts;	2001			
C. Governance reform				
1. Complete the treasury reform by:	2001			
(i) setting up regional treasuries in the remaining 6 rayons subject to availability of banking				
facilities;	2000			
(ii) extending treasury coverage of payments to all central and local government transactions; and	2000			
(iii) completing preparation of a detailed treasury instruction manual 2001	2001			
2. Submit to Darliament a new law on public finances	2001			
<ol> <li>Submit to Parliament a new law on public finances.</li> <li>Eliminate tay offset mechanism in state dabt service to Uzbekisten through Tajik Pail</li> </ol>	2001			
<ol> <li>Eliminate tax offset mechanism in state debt service to Uzbekistan through Tajik Rail.</li> <li>Publish fourth quarter budget execution, MTFF, and PIP documents.</li> </ol>	2000 2001			
5.Establish an independent external audit agency.	2001			
6. Introduce a "black book" mechanism for private enterprises. 2000	2001			
7. Finalize a plan for judicial reform. 2000	2000			
8. Complete the public procurement reform. 2001	2000			
D. Financial sector reform.	2001			
<ol> <li>Introduce repos and reverse repos and introduce Lombard facility.</li> </ol>	2000			
<ol> <li>Phase out NBT credit auctions.</li> </ol>	2001			
3. Implement bank restructuring programs for Agroinvestbank, Savings Bank, Vneshekonombank,	2000-2001			
and Orionbank.				
4. Conduct annual audits of the NBT by an internationally reputable firm. 2000-2003	2000-2003			
5. Publish the audited financial statements for the commercial banks and the NBT.	2000-2003			
6. Increase gradually, and strictly enforce, minimum capital requirements for banks to US\$3 million.	2002			

E. Privatization	
1. Privatize(full payment received) medium and large scale enterprises cumulatively since January 1,	
1998 as follows:	
280 sale contracts with 250 full payments; End- 2000	End-2000
340 sale contracts with 310 full payments. Mid-2001	End-2001
F. Private sector environment	
1. Start to develop TADAZ in accordance with the restructuring plan agreed with IFC.	2001
2. Identify state-owned enterprises responsible for most tax and inter-enterprise arrears and develop	2000-2001
their restructuring plans.	
3. Establish small and easily accessible private business centers.	2001-2003
4. Prepare a plan to make corporate governance consistent with best international practices	2002
G. Land reform	
1. Establish a land registry system in the State Committee for Land Resources (SCLR) and ensure	2001
that:	
(i) requirements that newly created farms register with other agencies or institutions are eliminated,	
and	
(ii) registration fees are kept to a minimum.	
2. Restructure state and collective farms by:	
(i) issuing land use and land share certificates, and	
(ii) registering the newly established farms with the land registry system as follows (cumulative	
since June 2000): Additional 60 farms since June 2000	2000
	2000
Additional 120 farms during 2001 H. Agriculture	2001
1. Amend procedures and institutional arrangements to ensure fair transfer of land and agricultural	2000-2002
assets to private sector.	2000-2002
2. Begin rehabilitation of the irrigation system by developing a plan for improving cost recovery.	2001
3. Develop a rural credit system.	2001
4. Establish a unit in the SCLR for supporting newly established private farms.	2000-2002
5. Review the present system of taxing agricultural enterprises with the objective of introduction	2000 2002
changes to make the system simpler and more equitable.	2000
6. Draft legislation for improved management and distribution of water resources.	2002
I. Legal reform	
1. Enact a new Secured Transaction Law to improve contract enforcement. 2001	2001
2. Amend the Bankruptcy Law to introduce specific liquidation mechanisms. 2001	2001
3. Amend the Law on Collateral to provide for better enforcement. 2001	2001
4. Develop a new Law on Employment consistent with incentives for growth and private sector	2002
development.	
J. Energy	
1. Approval of Energy and (Transport) Laws and completion of the reorganization of related	2000
ministries. 2000	
2. Submit to ADB an action plan for full cost recovery for electricity use with the following targets:	2000
(i) Industry: 75 percent cost-recovery	
100 percent cost-recovery	2001
(ii) Households: 100 percent cost recovery	End-2002
3. Phase-out special electricity tariff for TADAZ: 2001-2002	2005
4. Submit to ADB an action plan for reducing the accounts receivable of Barki Tajik and	2001-2002
Tajikkumservice to an average of:	
6 months 2001	
3 months 2002	
5. Submit an action plan to ADB for corporatizing and commercializing Barki Tajik.	
(To be determined as part of Energy Sector Action Plan under preparation with ADB.)	
K. Telecom sector	2000 2001
1. Develop and implement strategy for the reform of telecom sector, including regulatory	2000-2001
framework, with a view of establishing competitive operating environment and attracting foreign	
investment. Source: Tajikistan: Interim Poverty Reduction Strategy Paper- Annex	
Source: 1 ajikistan: interim Poverty Reduction Strategy Paper- Annex	

# Country 'Tajikistan' Period From: 1994 To: 2002

Single C	Country Projects - 3 Projects							
Country	Project Name	Region	Focal Area	Agency	Project Type	GEF Grant (US\$M)	Project Stage	Details & Documents
Tajikistan	Biodiversity Strategic Action Plan with Clearing House Mechanism	ECA	Biodiversity	UNDP	Enabling Activity	0.193	CEO Approved	11
Tajikistan	Enabling the Republic of Tajikistan to Prepare its First National Communication in Response to its Commitments to the UNFCCC	ECA	Climate Change	UNDP	Enabling Activity	0.327	CEO Approved	Ĩ
Tajikistan	Programme for Phasing Out Ozone Depleting Substances	ECA	Ozone Depletion	UNDP	Medium Size Project	0.989	CEO Approved	I
	Subtotals for	the Resul	t			1.509	3 Pr	rojects
Regional a	nd Global Projects - 2 Projects							
Country	Project Name	Region	Focal Area	Agency	Project Type	GEF Grant (US\$M)	Project Stage	Details & Documents
Regional	Promoting Compliance with the Trade and Licensing Provision of the Montreal Protocol in Countries with Economies in Transition (CEITs)	ECA	Ozone Depletion	UNEP	Medium Size Project	0.694	CEO Approved	II
Regional	Water and Environmental Management in the Aral Sea Basin	ECA	International Waters	IBRD	Full Size Project	12.025	CEO Endorsed	I
Subtotals for the Result					12.719	2 Projects		

## **TAJIKISTAN: IACD**

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