

# KYRGYZ REPUBLIC: ISSUES AND APPROACHES TO COMBAT DESERTIFICATION

Discussion Draft

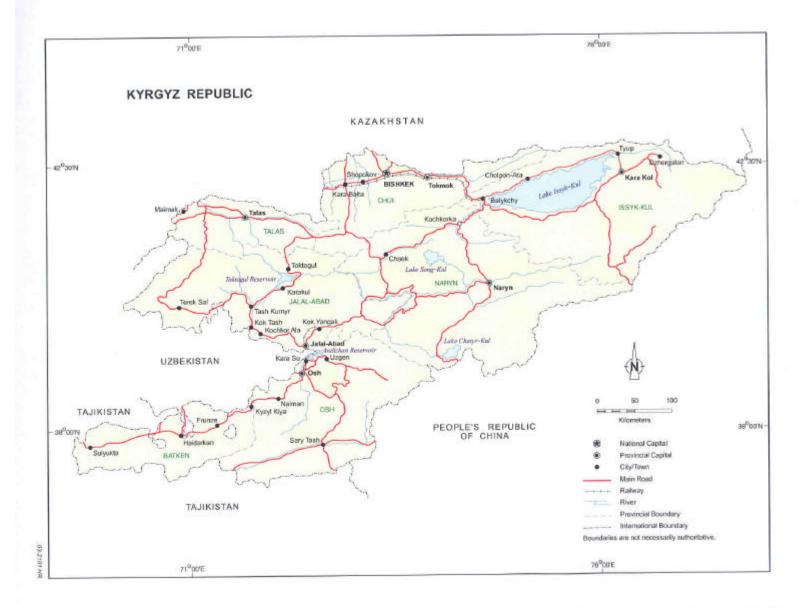
June 2003

Shiv Saigal, Consultant TA 5941-REG: Combating Desertification in Asia

The views expressed in this report are those of the author and do not necessarily reflect the views and policies of the Asian Development Bank, or its Board of Governors or the governments they represent.

The Asian Development Bank does not guarantee the accuracy of the data included in this report and accepts no responsibility for any consequences of their use.

Use of the term "country" does not imply any judgment by the authors or the Asian Development Bank as to the legal or other status of any territorial entity.



#### **CURRENCY EQUIVALENTS**

US\$1 = SOM 48 (April 2002)

#### **ABBREVIATIONS**

ADB – Asian Development Bank

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 CTAC – Consolidation Technical Assistance Credit

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
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

IDA – International Development Association
 IFC – International Finance Corporation

IFAS – International Fund for Saving the Aral Sea

IMF – International Monetary Fund

KAZ – Kazakhstan KYR – Kyrgyz Republic

MEAs – multilateral environmental agreements

MOU – memorandum of understanding NAP – National Action Program -UNCCD

NFP – National Focal Point

NEAP – National Environmental Action Plan
NGO – non-governmental organization
NPRS – National Poverty Reduction Strategy
NSPR – National Strategy for Poverty Reduction

ODS – ozone-depleting substances PIP – Public Investment Plan PRC – People's Republic of China

PREGA – Promotion of Renewable Energy, Energy Efficiency and Greenhouse

Gas Abatement Projects (an ADB RETA)

POP – persistent organic pollutant

PPTA – Project Preparation Technical Assistance
RAP – Regional Action Program under UNCCD
REAP – Regional Environmental Action Plan

REC – Regional Environment Center

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

SPECA – Special Program for the economies of Central Asia SRAP – Sub-regional Action Program under UNCCD

TA – Technical Assistance

TACIS – Technical Assistance for the Commonwealth of Independent States

TAJ – Tajikistan TRK – Turkmenistan

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

UZB – Uzbekistan WB – World Bank

## KYRGYZ REPUBLIC: ISSUES AND APPROCHES TO COMBAT DESERTIFICATION (IACD-KYR)

#### Table of Contents

			Page
Map			i 
	eviations		ii
Execu	tive Sun	nmary	V
Introd	luction		1
I.	The 1	Macroeconomic and Poverty Context	1
	A.	General	1
	B.	Economy and reforms	2 2
	C.	Poverty	
II.	Land	l Degradation/Desertification	3
	A.	Main areas affected by degradation	3
	B.	Types of land degradation and underlying causes	5
	C.	The economic costs of land degradation	5
III.	Impl	ementation of the CCD	6
	A.	The National Action Programme (NAP)	6
	B.	The Focal Agency & Institutional Framework	7
	C.	Strengthening NAP process and participatory approaches	8
IV.		y Framework	11
	A.	Macro Policy Agenda	11
	B.	Strategy for Poverty Reduction	12
	C.	Legal Framework	14
	D.	Natural Resources Management and Environmental Policies	15
	E	Agricultural Policies	16
	F.	Water Conservation Policies	17
	G.	Evolving a cohesive strategic framework to combat land degradation	19
V.		rities and Programs to Combat Land Degradation	19
	A.	Priorities of the Government to combat land degradation	19
	B.	Assistance to Kyrgyz Republic from external donor agencies	21
	C.	Support for sub-regional/regional programs to combat land degradation	26
VI.	Issue	s & Opportunities in implementing UNCCD in Kyrgyz Republic	28
	A.	Obligations to support UNCCD implementation under the Convention	28
	B.	Improving the understanding of the root causes of land degradation	29
	C.	Institutional factors constraining implementation of NAP	30
	D.	The policy and legislation related constraints	31
	E	Constraints to effective program development and implementation	32
	F.	The possibilities of greater GEF involvement in land degradation	34
	G.	Forging strategic partnerships among donors and domestic stakeholders	35
Anne	xes		

- 1 Economic, Social and Environmental Indicators
- Economic, Social and Environmental Indicators

   A. Kyrgyz Republic: State of Surveyed Agricultural Land
   B. Kyrgyz Republic: Income from irrigated and drylands

   List of Draft Laws to be Adopted under Kyrgyz Republic's CDF
   Kyrgyz Republic CDF: Involvement Matrix
   GEF Project Portfolio in Kyrgyz Republic
   Bibliography

#### COMBATING DESERTIFICATION IN CENTRAL ASIA

# KYRGYZ REPUBLIC: ISSUES AND APPROACHES TO COMBAT DESERTIFICATION (IACD-KYR)

#### **EXECUTIVE SUMMARY**

- 1. The ADB, with co-financing from the Global Mechanism (GM) of the United Nations Convention to Combat Desertification (UNCCD), approved the RETA No. 5941<sup>1</sup> to provide technical assistance to facilitate the implementation of the National Action Programs (NAPs) to combat desertification. The outcomes and activities of the RETA would serve to enhance the operations of a growing strategic partnership of donors interested in working together to strengthen the implementation of the UNCCD in Central Asia. The Kyrgyz Republic: Issues and Approaches Paper (IACD) has been prepared according to the conclusions reached at the working meeting of the National Focal Points (NFPs) and domestic consultants (DCs), the international consultant and representatives of the GM and 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 Kyrgyz Republic, Ms. Mira Arynova, and a large number of other background documents.
- 2. The report focuses on (i) macroeconomic & 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/NAP in Kyrgyz Republic.
- Macroeconomic and poverty context. Kyrgyz Republic is a mountainous and land-locked country characterized by harsh natural conditions and fragile ecosystems. The Government adopted macroeconomic and structural reform and its liberalization measures received effective support from international financial institutions (IFIs), UNDP and other donors, which assisted in the reorganization of the industrial and agricultural sectors of the economy. However, Kyrgyz Republic's two main export products, gold and electricity, have been affected by declining gold prices and uneven implementation of regional water-energy agreements. It also faces a major challenge to its macro-economic stability due to a very high debt burden. The Government has approved a debt reduction strategy which calls for a streamlining of the public investment program, accepting new loans only with a high grant element, and ensuring stringent fiscal discipline. The National Poverty Reduction Strategy (NPRS) of the Kyrgyz Republic, adopted in December 2002, notes that there has been some improvement in the poverty situation in the country. In 1999 the incidence of poverty was 55.3 percent of the population, with over 23 percent of population in extreme poverty. Since then there has been some reduction in the poverty level, and in 2001 less than 50 percent of the population was classified as poor, while extreme poverty went down to 13 percent. However, no improvement has been observed in the level of unemployment - an important poverty factor. The narrow product composition of the GDP and exports renders the economy vulnerable to external shocks. In addition the Republic's degraded environment threatens economic growth potential.
- 4. **Land degradation/desertification.** The main land degradation processes at work in Kyrgyz Republic include soil erosion, salinization and swamping, chemical pollution, and destructive changes of vegetable covering. According to the Kyrgyz classification system, there are three ecological zones low

V

.

<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)

<sup>&</sup>lt;sup>2</sup> The meeting reviewed the interim outputs of the RETA by the domestic consultants and the international consultant.

mountain (desert and semi-desert steppe), moderate mountain (forests), and high mountain (Sub-alpine/Alpine). The problems of natural resource degradation are conditioned by the geophysical and climatic characteristics of various zones which are compounded by excessive and inappropriate economic activity. Intensity of erosion is dependent mostly on a wind regime, soil lithology and inappropriate agricultural activities on steeply sloping lands in a mountainous country (see table 2 in the main report on ecological zones. More than 51 percent of the 10.6 million ha of arable lands in Kyrgyzstan are affected by erosion. About 90% of cultivated crops are grown on irrigated sites with significant slope and as such are subject to washing off of soils estimated at losses of 15-20 tons irrigation from one ha. The natural conditions of Kyrgyz Republic make it practically not possible to support agriculture without irrigation. However, in some regional and territorial features of the Republic, it is possible to practice rainfed agriculture, when the spring storage of water in the ground is enough to sustain the crops.

- 5. Rangelands and forests are the dominant land cover in the Kyrgyz Republic. The main categories of land use are: 80 percent natural pastures, 7 percent forests, 10 percent annual crops, 2 percent hay lands, and 1% orchards.<sup>3</sup> Forest resources play an important role in water regulation, protection from soil erosion, conservation of biological diversity, and the stabilization of the ecological balance. Dependence on fuel wood use is potentially problematic and substitute energy source need to be explored to prevent the risk of severe deforestation in the coming years. Pastures located on slopes with steepness of more than 20 degrees are severely degraded by wind erosion. The prevalence of small cattle ranchers has led to transition from the pasturing of cattle at a distance from settlements to primitive shepherding which makes destructive use of pastoral land causing severe degradation.
- 6. As an upstream country, Kyrgyz Republic faces certain peculiar challenges in the context of water resource management issues. It has presently to carry the major share of the costs related to operating the water reservoirs and the main water conveyance systems of the Syr Darya River Basin, which is also (or mainly) providing water to the downstream states. The Kyrgyz Republic receives limited and uncertain compensation from countries downstream for the maintenance of water supply systems and no support for management of the upper watershed (see para 18).
- 7. Hard and structured data on the dimensions and types of land degradation, or estimates of the economic costs of land degradation were not readily available. While it is difficult to put a dollar value on environmental damage, a world bank study on the mountain and forest sector in the Kyrgyz Republic estimates that the annual value with improved grassland yields would be 62% higher \$477 million as compared with \$296 million based on poor grassland yields.
- 8. **Implementation of the UNCCD.** The National Action Plan (NAP) of Kyrgyz Republic was approved in December 2000. The NAP coverage is cross-sectoral e.g., geo-strategic position of the country, socio-economic situation, factors and scales of desertification, priority activities, projects and programs, legislative frameworks, and a scheme of NAP implementation. In Kyrgyz Republic, NAP implementation has received budgetary support mainly for scientific research on monitoring of irrigation land salinization processes. The process of implementation is also intended to place greater emphasis on involvement of farmers, farms and peasant farms, agricultural cooperatives, NGOs, women and youth organizations, and local self-administration bodies. The implementation strategy also aims to fully utilize decentralized local self governance structures at the district and village levels to execute pilot activities. The strategy for NAP implementation is sound, only there are as yet few concrete activities on the ground to translate the strategy into action, mainly because of lack of funds and weak management capacity. Also, many of the pilot project concepts need to be more fully thought through and better articulated in order to attract grant financing from interested donors.

<sup>&</sup>lt;sup>3</sup> Source: ADB: Central Asian Environments in Transition, 1997, p.122.

- 9. A National Center to Combat Desertification (NCCD) was set up within the Kyrgyz Research Institute for Irrigation of the Ministry of Agriculture, Water Resources and Processing Industry of Kyrgyz Republic. NCCD steered the NAP formulation, and is responsible under the NFP-CD for its implementation and generally for coordination of activities on combating desertification in the country. However, NCCD has no formal official status. The NFP-CD, Dr. Kulov, is Director of the Kyrgyz Scientific and Research Institute for Irrigation. The National Coordination Body (NCB) of UNCCD is well represented by all concerned ministries, including representatives of the Ministry of Finance, and by NGO representatives.
- 10. The NAP process, and more particularly the office of the NFP/National Coordinator for UNCCD needs to be strengthened in the following areas:
  - (i) Government needs to confer official status on the National Center to Combat Desertification (NCCD) and provide it with a formal budget line. The situation of its staff should also be formalized.
  - (ii) The NFP, as national coordinator for UNCCD and Secretary of the NCB, needs equipment and expertise in areas such as electronic communications, computers, translation and interpretation and hiring of expertise from the private sector, including NGOs, with a view to preparation of proposals or materials for dialogue with the donor community. The stringent fiscal situation does not permit budgetary allocations to meet these urgent needs for the effective implementation of UNCCD in the Republic. The access to technical assistance grants from donor agencies would require the NCCD to be able to prepare project concepts and proposals as basis for a meaningful dialogue with interested donor agencies. It does not currently possess the necessary project development capacity, or even translation facilities, to undertake such dialogue effectively.
  - (iii) Capacity building support to the focal institution is needed in the skill areas such as program and project development, training and exchange visits. Program development support may particularly focus on preparation of concept notes and project proposals relating to addressing land and water degradation in order to approach potential donor agencies.
  - (iv) In the short-term, funds are needed for strengthening the office of the NFP to mainstream his activities into the government decision-making processes. For instance, the status of the NCB needs to be formalized so that it can submit its recommendations/ issues relating to NAP/CCD implementation to the regular economic sessions of the Government intended for the solving of multidisciplinary problems. The NFP requires urgent *bridging* grant funds (from interested development partners) for engaging experts, as short-term consultants, even for the preparation of materials to the NCB and economic sessions of the Government.<sup>4</sup>
- 11. 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. The implementation process should also exploit synergies with other multilateral environmental agreements to which the Kyrgyz Republic is party as well as the NEAP. In this context, mere emphasis on establishing formal administrative mechanism, important as they are, would not be a sufficient condition to promote synergies. Mainstreaming is a key issue for all the conventions and could be a basis in determining areas of synergy for mutual collaboration. Priorities for mainstreaming should be based on: (a) potential

<sup>&</sup>lt;sup>4</sup> According to the NFP, even a modest annual grant financing of US\$ 6-7, 000 per year would help improve the functioning of his office (see table 4 in main report).

returns due to the physical magnitude of the problems; (b) institutional feasibility considerations; and (c) estimates (even back of the envelop estimates) of relative economic costs and 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.

- 12. The focus of NAP implementation should be on a three-pronged approach:
  - Mainstreaming with the Comprehensive Development Framework (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, through making participatory approaches an integral part of programs to combat land degradation.
  - Operational orientation to the implementation process through focus on pilot projects and cross-sectoral investment projects of concerned agencies tied to appropriate policy adjustments.

#### **The Policy Framework**

- Macroeconomic policies. The CIS-7 Initiative of the major international financial institutions (IFIs) - IMF, World Bank, ADB & IBRD- to promote poverty reduction, growth and debt-sustainability in seven low-income Commonwealth of Independent States (CIS) countries<sup>5</sup> emphasizes that in the case of Kyrgyz Republic the priorities for future economic growth and poverty alleviation comprise the following policy reform agenda: (a) the external debt problem should be controlled through fiscal consolidation; (b) the framework to prioritize public expenditures must be established; (c) in particular, the level and composition of social spending needs to be reviewed; (d) the restructuring and privatization of the remaining large state-owned enterprises is critical not only to the debt management strategy but also because their poor performance places a significant drag on potential output growth; (e) reform of the agricultural sector is important to increase agricultural productivity and promote rural growth; and (f) work to improve regional cooperation to promote intra-region trade necessary to exploit its export The Government is in agreement with these reforms but is handicapped by weak opportunities. administrative capacity to manage the problems of transition, and by lack of financial resources to cushion the negative impact of drastic reform and restructuring. Note that point (e) is of particular relevance to UNCCD NAP implementation.
- 14. Poverty Reduction Strategy. The Government of the Kyrgyz Republic, in order to move forward with its development and reform agenda has adopted two basic policy frameworks. The first is the Kyrgyz Republic CDF to 2010 which sets out the main goals and contours of its long term national strategy. The second is a more incisive medium term strategy framework called the National Poverty Reduction Strategy (NPRS) laying down the Government's policy and programs for 2003-2005. The mission of the poverty reduction strategy is "to expand the opportunities for each citizen to have an adequate, equitable, and comfortable life in the Kyrgyz Republic". This suggests that Kyrgyz people are not poor because they cannot provide for themselves, but more because they lack opportunities. The NPRS process aims to provide and expand these opportunities.
- 15. <u>The legal framework</u> A significant legislative provision of direct relevance to the UNCCD NAP implementation is the amendment to Article 4 of the Constitution<sup>6</sup> of the Kyrgyz Republic. It now

<sup>6</sup> Annex 6 gives the provisions relating to Land issue in the Constitution of the Kyrgyz Republic.

<sup>&</sup>lt;sup>5</sup> Armenia, Azerbaijan, Georgia, Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan.

provides that "land can be in state, municipal, private and other patterns of ownership". The main limitations of the legislation are: serious inconsistencies in legislation, weak administrative capacity to implement the law and considerable scope for bureaucratic discretion in application of laws and regulations. There are a number of new laws to be adopted under the CDF (see Annex 3). The list includes laws: (i) On Volunteership; (ii) On Local Self-Government's Finance Principles; and (iii) On Communal Ownership for Land and Other Natural Resources.

- Natural resources management and environmental policies. Past and current natural resource management practices in agriculture, irrigation, forestry and pastures have contributed to the problems of land and pollution. The Kyrgyz Republic NPRS states that ensuring long-term ecological sustainability is a factor of special importance directly influencing the achievement of steady results in poverty reduction. The environment conservation development strategy is to be based on two fundamental principles: the principle of integration of economic and environmental policies and the principle of individual responsibility. Within the framework it is important to adapt the legislation on nature conservation to the conditions of the transition economy. It is equally important, to harmonize the national legislation of the country with international legal documents. It is intended to draft new laws in the area of environment protection and revise the regulatory and legal framework in compliance with international standards. In this connection it is planned to draft the Law of the Kyrgyz Republic on Environmental Insurance. There is considerable common ground in the environmental policies and the issues involved in combating land degradation/desertification; however, much of the NEAP agenda remains to be implemented to date.
- 17. Agricultural sector policies. The most serious issues facing the agriculture sector are low productivity, farm units operating inefficiently as subsistence farmers, and increasing rural unemployment. For increasing agricultural productivity, it is necessary to improve the supply of inputs and technical support services through the private sector as the public sector is in no position to manage these services. Thus, it is necessary to develop input supply markets, improve infrastructure and promote private service providers. The strategic public-private sector mix would involve private sector handling seeds, machinery and fertilizers, with the government taking care of rehabilitation and maintenance of main irrigation channels, while shifting the responsibility for on-farm irrigation to farmers. A new Law on Water Users Associations (WUAs) and experience with associated pilot activities give reason for optimism in this regard (see para 19).
- 18. Water conservation policies. Water use inefficiencies are attributable to a number of factors deterioration of storage and irrigation canal and water control infrastructure involving water losses, weak on-farm water management and conservation frameworks, primary and secondary salinization due to water and wind erosion, water-intensive cropping patterns and absence of a strong regulatory system of incentives 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. Access to safe potable water is another important issue. Some of these issues are connected with regional cooperation on transboundary dimensions of water resource management and water-sharing arrangements. In the above context, there are periodic discussions between the CARs at the highest levels of Government, but many issues remain to be resolved in an area which is politically quite sensitive. Some progress has been made through bilateral discussions. For instance, the 1998 Syr Darya Agreement between the Kyrgyz Republic and Kazakhstan provides for sharing O& M costs between the two countries.
- 19. ADB and IDA have supported the development of WUAs, with focus on WUAs providing an organizational structure in which farmers come together to make joint decisions about irrigation and

drainage and to contract and negotiate with government agencies involved in water supply and responsible for maintaining the main water distribution channels. In this connection, the Law on Water Users Associations is a step forward. The main issues which need particular attention are:

- Provision of long-term water rights (rights over on-farm irrigation facilities) to farmers and WUAs;
- A decentralized policy on irrigation service fees (ISF), rather than such fees being determined by the national Parliament;
- Allocation from the state budget of sufficient funds for operation & maintenance (O&M) of the main channels, rather than imposing excessive irrigation charges on the WUAs.
- 20. <u>Evolving a cohesive strategic framework to combat land degradation</u> can best be handled as an integral—mainstreamed—part of the government's development planning and budgetary process. The Government of Kyrgyz Republic has been the most open, among the CARs, to adopt policies of liberalization and deregulation. It has also in place the basic framework for a cohesive development strategy in the form of the Comprehensive Development Framework (CDF) and poverty reduction strategy (NPRS). Therefore, the NFP needs to establish a closer interface between the UNCCD/NAP and the national sectoral development policy and program frameworks.

#### Priorities and programs to combat land degradation

- 21. <u>Government priorities</u>. The main priority areas requiring urgent preventive measures to control land degradation in Kyrgyz Republic are: (i) water erosion as a result of irrigation and precipitation on slope lands, salinization, and swamping in lowlands affecting productivity of agricultural lands; (ii) overgrazing of pastures creating of problems of pastoral lands management; and (iii) felling of forests for fuel and as a consequence, wind and water erosion, and landslides –causing problems of forest and upper watershed management.
- 22. In terms of program development, this implies identification of pilot projects focused on:
  - Rational use and protection of land resources. Special attention to be given to integrating land and water resources management in upper watersheds;
  - Establishment of a national and regional market intelligence information systems in Central Asia for agricultural producers' support, with easy access by farmers about prices and production, and information about available volumes of production in the main markets both inside the countries and between the countries, and in the world market:
  - Enhancement of the capacity of village communities for eco-tourism management in the Kyrgyz section of the Great Silk Road, which would generate resources for development and incentives for controlling land degradation;
  - Development of a system of monitoring (and inventory) of agricultural lands, pastures, and water use:
  - Reforestation, protective forestation, and alternatives to firewood in rural areas;
  - Internet connectivity of Kyrgyz rural periphery to information network for improvement of economic base, education and culture; and increase of rural population access to agroecological information through mass media.
  - Research and extension to test and promote application of modern methods to determine of the mode of crop irrigation, and prevent unproductive over-use of water, water logging and salinization of lands; and
  - A regional program for sustainable management of mountain pastures in Central Asia.

- 23. The Problem of Financing Priority Programs from domestic resources. The Kyrgyz Republic is currently passing through severe budgetary constraints even to meet its current expenditure, much less to finance its development programs. According to projections of application and broad funding sources under the CDF Strategy 2000-2010, its total state budget expenditure in 2001 was 17.7% of GDP and is projected to be reduced to 16.8% of GDP in 2004. Its development budget (PIP) for 2001 was 7.0% of GDP and is projected to be restricted to 4.2% of GDP. The main possibilities for domestic financing of priority programs to combat desertification would consist mainly in (i) switching public expenditures and reordering budgetary allocations and (ii) exploring possibilities of cost sharing by beneficiaries and private sector. Thus, in the short to medium term, such programs do need considerable pump-priming support from external development partners particularly to finance costs of institutional strengthening, capacity building and some community-based pilot projects.
- 24. Accessing External Assistance. In one sense, Kyrgyzstan has perhaps the best record on policy reforms in the Central Asia region, which should make it a good candidate for external funding support. But this advantage is offset by the enormous debt burden it accumulated in the 1990s, partly because of rush of borrowing from both commercial and multilateral development institutions. This has slowed down the pace of external borrowing and increased reliance on grant or highly concessional credits. In this context, it needs to be recognized that UNCCD implementation has urgent requirements of external assistance in three main areas: institutional strengthening, capacity building and pilot projects in research, internet connectivity and community-based pilot projects. Improved management of land and water resources through controlling severe land degradation would have a positive impact on poverty reduction. Therefore, there is a strong case for the development partners to give a stronger and more direct priority to assisting the Kyrgyz CCD-Focal Institution and NFP/CD in their activities to address land degradation issues. Such assistance may be considered in the context of the obligations under the CCD of both the developing member countries affected by desertification and of the developed member countries to assist the efforts of such affected countries to combat desertification/ land degradation (see Box 3 in the main report).

#### Issues and Opportunities in implementing UNCCD in the Kyrgyz Republic

- 25. Part VI of the main Report contains a discussion of the main issue areas. Here, it may be sufficient to touch upon some of the main points. The main constraints to CCD/NAP implementation are common to all Central Asian countries. These may be summarized as follows:
  - The NAP is thin on policy and program content, with little attention to specific investment needs in sectors such as agriculture, irrigation or drainage, and land reclamation.
  - Reliance on "stand alone" projects or activities aimed at combating desertification, rather than incorporating these activities as into cross-sectoral programs of key 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 approaches requiring involvement of a number of agencies. Most agencies, however, work as enclaves concerned with their own mandates and budgets. This means different ministries work in isolation and at times at cross purposes.
- 26. At an operational level, the approach to tackle these constraints 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,

- such projects must be developed within the CDF/NPRS framework and aligned to national budgetary and PIP processes.
- (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 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.
- 27. **New External Financing Opportunities**. A new window of opportunity for funding activities in support of the NAP's implementation 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." Other innovative options in the context of the Kyoto Protocol and follow up to the Bishkek Mountain Summit hosted by the Kyrgyz Republic may also be explored by the CCD Focal Institution/NFP.
- 28. 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 possible joining of Switzerland, IFAD and ICARDA would offer new opportunities to enhance the implementation the NAP, SRAP/RAP and promote regional cooperation among Central Asian countries. Vigorous follow up of the outcomes of current RETA would provide the concrete mechanisms 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.

#### **Main Conclusions/Recommendations**

29. Part VI of the main report pulls together the main 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:

Conclusion no. 1: It is observed that implementation of the NAP activities is stalled due to the dual constraints of limited capacity and budgetary funds. Even though the Kyrgyz Republic is pursuing a policy of fiscal discipline, the situation needs to be reviewed at senior levels by the Government to consider making appropriate financing from domestic resources available for the priority programs to combat desertification. As for the development partners, their support to the Republic is being provided within the framework of CDF/NPRS. Even so, there is a strong rationale for the multilateral and bilateral donors to consider appropriate adjustments in their program priorities so that some grant resources can be earmarked to pump prime some of the activities which are directly or indirectly supportive of UNCCD objectives through a conscious support to UNCCD through the NAP framework. This might provide a good entry point to contribute to the objectives of sustainable management of ecology and environment, and poverty reduction.

Conclusion no. 2: "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. 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 community-based action research with value-added for technology up-gradation, on-ground solutions, or efficient resource conservation. The priority areas and pilot projects requiring TA support should be identified with particular focus on:

- Study of causes underlying the decline of productivity of agricultural lands in Kyrgyzstan –technical, institutional and policy.
- Research on prevention of water loss techniques in up-stream water storage and distribution networks, and cost-effective approaches to containing water erosion and salinization problems.
- Participatory approaches to pasture and rangeland management

**Conclusion no. 3:** The corrective actions to overcome the institutional constraints to the implementation of NAP/CD primarily rest with the Government of the Kyrgyz Republic. However, the interested development partners may consider pump-priming these actions through policy dialogue, coupled with some funding support to strengthen the capacity of the NFP and of the Focal Institution:

- (i) In the short-term, funds are needed for strengthening the office of the NFP to mainstream his activities into the government decision-making processes. For instance, the status of the NCB needs to be formalized so that it can submit its recommendations/ issues relating to NAP/CCD implementation to the regular economic sessions of the Government intended for the solving of multidisciplinary problems. The NFP requires urgent bridging grant funds (from interested development partners) for engaging experts, as short-term consultants, even for the preparation of materials to the NCB and economic sessions of the Government.
- (ii) Over time, however, concerted actions are needed to promote synergies between the NAP-CD and other Rio Conventions and NEAP. Here again, the engine to drive this process is missing. Strengthening the policy and programmatic content of the Action Plans to implement these Conventions, including that of the CCD-NAP, would catalyze collaborative activities around concrete action areas. Such collaboration must be conceived within the CDF/NPRS framework. Mere emphasis on establishing formal administrative mechanism, important as they are, would not be a sufficient condition to promote synergies. Mainstreaming is a key issue for all the conventions and could be a basis in determining areas of synergy for mutual collaboration. mainstreaming should be based on: (a) potential returns due to the physical magnitude of the problems; (b) institutional feasibility considerations; and (c) estimates (even back of the envelop estimates) of relative economic costs and 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.
- (iii) NAP implementation should promote more direct involvement of civil society and NGOs, working in close concert with decentralized administrative bodies at sub-national levels and particularly with the elected village councils to promote community-based participatory approaches to combat desertification. The efforts of the NFP to establish and use information technology for extending the outreach of the NAP activities to the grassroots may be supported by development partners.

#### Conclusion no. 4:

(i) The best entry points to establish a closer interface between the UNCCD/NAP and the national development policy framework would be to focus on measures which address land degradation problems in the context of improving agricultural productivity and promoting efficient water use. This should be relatively easy since the responsibility for

UNCCD implementation lies with the Ministry of Agriculture, Water Resources and Processing Industry (MAWRPI). However, it needs to be realized that land degradation is part of a broad environmental agenda and national action plans of the other environmental conventions. The most pragmatic approach would be for UNCCD-NFP to collaborate together with the Focal Points of other environmental National Action Plans and aim for a harmonized approach to link up with the CDF/NPRS frameworks. This would pave the way for evolving a coherent and synergistic policy framework sensitive to land degradation and other environmental concerns.

(ii) From the perspective of the Kyrgyz Republic, there are certain important issues of water sharing with other cars, which require regional and bilateral cooperation at the policy levels. A good illustration of bilateral cooperation is the 1998 Syr Darya Agreement between the Kyrgyz Republic and Kazakhstan, which provides for sharing O& M costs between the two countries.

Conclusion no. 5: The tight budgetary situation implies that extent of public funding to finance the priority projects/and programs to implement CCD/NAP seems to be very limited except through internal switching of budgetary allocations, combined with cost efficient use of such allocations. Though programs to combat desertification/ land degradation fall largely in the public-sector domain, the possibilities for cost sharing by the private sector and the beneficiaries would need to be explored. Finally, in the short to medium term, such programs do need considerable pump-priming support from external development partners particularly to finance costs of institutional strengthening, capacity building and some community-based pilot projects. Such support however should be mobilized to the maximum extent possible within the framework of CDF/NPRS.

**Conclusion no. 6:** Given the positive performance of the Kyrgyz Republic in policy reforms, the availability of the Governments CDF/NPRS development framework, and the involvement of a large number of development partners in many areas of Kyrgyz economic growth efforts (see Section G), it should be possible for the Government to work on some creative and "out-of-the-box" ways of mobilizing resources targeted at combating land degradation. These efforts could be helped by some preparatory technical assistance from interested development partners under the aegis of SPA framework.

# KYRGYZ REPUBLIC: ISSUES AND APPROACHES TO COMBAT DESERTIFICATION (IACD-KYR)

#### Introduction

1. The ADB, with co-financing from the Global Mechanism (GM) of the United Nations Convention to Combat Desertification (UNCCD), approved the RETA No. 5941<sup>1</sup> to provide technical assistance to facilitate the implementation of the National Action Programs (NAPs) to combat desertification. The outcomes and activities of the RETA would serve to enhance the operations of a growing strategic partnership of donors interested in working together to strengthen the implementation of the UNCCD in Central Asia. The Kyrgyz Republic: Issues and Approaches Paper (IACD) has been prepared according to the conclusions reached at the working meeting of the National Focal Points (NFPs) and domestic consultants (DCs), the international consultant and representatives of the GM and 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 Kyrgyz Republic, Ms. Mira Arynova, and a large number of other background documents.

#### I. The Macroeconomic and Poverty Context

#### A. General

The Kyrgyz Republic is situated in the north-eastern part of Central Asia. Mountains separate the country's economic-demographic centers, namely the Chui Valley in the North, and the Ferghana Valley in the South. It has a surface area of 199,900 sq. km. and population of 4.9 million, of whom 64% are Kyrgyz, 14% are Uzbeks and 13% are Russian. Over 60% of the population lives in rural areas. GDP is US\$ 1.6 billion and per capita GDP in 1999 was US\$ 300 (WB Atlas).<sup>3</sup> Harsh natural conditions and fragile ecosystems characterize the country's environment. The Republic is a mountainous country, with more than 94 percent at elevations of 1,000 m above sea level (msl), and 40 percent above 3000 msl. Lower altitudes in the Low Mountain Zone consist of highly productive, flat-lying lands (steppes), which are used for intensive agricultural production. In the higher parts of this zone, deserts give way to mountain steppes where various types of meadow grasses grow. Out of 199.9 thousand km2 of the total area of the Republic, only 30 percent is fit for permanent habitation, while only 20 percent comprises areas of relatively comfortable conditions where the majority of the population lives. Republic is located at the headwaters of the Syr Darya River system, which flows to the down stream countries of Uzbekistan and Kazakhstan in the Aral Sea Basin. Electrical power is the Republic's principal export commodity. Because of its aridity, irrigation is critical for crop production in the country. However, the irrigation sector faces severe land degradation problems, such as loss of productivity of arable lands, drainage and salinity problems.<sup>4</sup>

<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).

<sup>&</sup>lt;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> UN-System, Kyrgyzstan, Common Country Assessment, Bishkek, 2001.

<sup>&</sup>lt;sup>4</sup> ADB, "Central Asian Environments in Transition", 1997.

## B. Economy and reforms

- 3. The second half of 90s was an important stage for the country in strengthening the framework of the market economy. The Government liberalized commodity prices, trade and foreign exchange regimes and introduced its own national currency, Som. Major reforms such as small scale enterprises and land privatization have been implemented. The Government's reform and liberalization measures received effective support from international financial institutions (IFIs), UNDP and other donors, which assisted in the reorganization of the industrial and agricultural sectors of the economy, the financial sector, in improving corporate governance and education, and in the implementation of investment and technical assistance projects. However, economic growth, buoyant until mid-1998, was hit by a series of economic shocks and natural disasters. The 1998 regional financial crisis resulted in sharp reduction in trade with the FSU countries, the exchange rate depreciated, exerting a downward pressure on the Kyrgyz economy. By late 2000 adjustment in the domestic deficit, tight monetary policy, and the initiation of programs to reform the gas and electricity utilities and the banking sector, helped stabilize the situation. However, Kyrgyzstan's two main export products, gold and electricity, have been affected by declining gold prices and uneven implementation of regional water-energy agreements. Its trade prospects in other exports (tobacco and cotton) were adversely affected by regional trade restrictions. It also faces a major challenge to its macro-economic stability due to a very high debt burden. Kyrgyzstan's total external debt at end-2000 amounted to \$ 1.7 billion (131 percent of GDP), 57% of which was owed to IFIs, 29 percent to bilaterals, and the remainder (14%) to commercial creditors.<sup>5</sup>
- 4. The Government has approved a debt reduction strategy which calls for a streamlining of the public investment program, accepting new loans only with a high grant element, and a debt repayment program, respecting the comparability of treatment of creditors, potential proceeds from privatization, debt-equity swaps and other sources. It is also recognized that without strong fiscal adjustment, external debt would remain unsustainable. According to the CIS-7 country note, with stringent policy adjustments, the NPV of debt-to-government revenues should improve by 20 percentage points by 2004. In addition, the country would require a hefty dose of debt rescheduling to sustain economic growth.
- 5. **To conclude**, recent patterns of growth indicate that gold mining and agriculture have been the most dynamic sectors, while manufacturing overall has shrunk significantly. However, agriculture has not contributed significantly to poverty reduction as this sector has been absorbing the bulk of the labor shed by the other sectors for almost a decade and, thus, registers the lowest productivity rates in the entire economy. However, the narrow product composition of the GDP and exports renders the economy vulnerable to external shocks. In addition the Republic's degraded environment threatens economic growth potential, besides contributing to the increase in the incidence of poverty due to deterioration of social infrastructure and rise in unemployment and underemployment.

#### C. Poverty

6. The Kyrgyz Republic is an agrarian country with two-thirds of the population living in rural areas. Eighty four percent of the population lives on less than \$4.30 per day and 49% on less than \$2.15 per day (1999). The National Poverty Reduction Strategy (NPRS) of the Kyrgyz Republic, adopted in December 2002, notes that there has been some improvement in the poverty situation in the country according to the data from the recent poverty surveys. In 1999 the incidence of poverty was 55.3 percent of the population, with over 23 percent of population in extreme poverty. Since then there has been some

World Bank-Country Notes: Debt Sustainability and Policy Priorities to Ensure Growth in the CIS-7 Countries, February 2002 (Joint exercise of the World Bank, IMF, ADB and EBRD).

<sup>&</sup>lt;sup>6</sup> The World Bank, Country Assistance Strategy Progress Report for the Kyrgyz Republic, November 9, 2001.

ADB, Technical Assistance to the Kyrgyz Republic for Environment Monitoring and Management Capacity Building II, 22 September 2000 (R 198-00).

reduction in the poverty level, and in 2001 less than 50 percent of the population was classified as poor, while extreme poverty went down to 13 percent. Along with reduction of poverty, indicators of poverty gap (from 19.8 percent in 1999 to 13.9 percent in 2001) and severity of poverty (from 9.8 percent to 5.6 percent respectively) declined. Rural poverty is higher than it is in urban areas. Poverty incidence is uneven throughout the Republic. The highest poverty incidence is noted in Naryn oblast and Talas oblast. The population of Bishkek City and Chui oblast is less poor. It is considered that Kyrgyz people are poor because they lack opportunities. The NPRS process aims to provide and expand these opportunities. The national program of poverty alleviation, "Araket", is an important component of the Republic's Comprehensive Development Framework (CDF) during the first stage of implementation in 2001-2003. A positive development is some reduction in level of inequality. In 1999, the expenditure level of the wealthiest strata of the population was almost seven times higher than that of the poorest. This gap shrank to 4.8 times in 2001. Reduction in expenditure inequality is explained primarily by a more than 10 percent increase in the income of the poorer levels of society. As a result, the Gini index has declined. These positive trends have helped to alleviate social tension in the country. However, no improvement has been observed in the level of unemployment - an important poverty factor. According to the Employment Department of the Ministry of Labor and Social Protection of the Kyrgyz Republic (MLSP), in 2001, the registered unemployment level was 3.2 percent, 0.3 percent higher than in 1999. The unemployment rate among women remains higher than that of men. The highest rate of unemployment is noted among people 18-49 years of age. <sup>8</sup> Table 1 gives an overview of the scale of poverty in the Kyrgyz Republic.

Table 1: Poverty in urban and rural areas (in percent)

Years	Poor			of these, extremely Poor			Poverty	Gini
	Total	Urban	Rural	Total	Urban	Rural	Gap <sup>1</sup>	coefficient
								(Total - for
								consumption)
1996	43.5	30.3	49.6	19.1	10.3	23.3	15.9	0.370
1997	42.9	22.2	55.3	14.8	4.9	20.7	13.9	0.410
1998	54.9	42.2	62.4	23.0	18.3	25.8	19.5	0.360
1999	53.3	42.4	60.0	23.3	17.1	25.6	19.8	0.372
2000	52.0	43.9	56.4	17.8	12.7	20.5	17.7	0.326
2001	47.6	41.2	51.0	13.5	9.6	15.6	13.9	0.320

Ratio of Consumption Level of the wealthiest 20% of the population

relative to the poorest 20% of the population was: in 1996(6.8 times) and in 1999 (6.8 times)

Source: Kyrgyz Republic- Interim NPRS, June 2001, Tables 1 & 2 & Table 1&2 of NPRS, December 2002.

#### II. Land Degradation/ Desertification

#### A. Main areas affected by land degradation

7. The Kyrgyz Republic is divided into three zones: (i) the low mountain and foothill zone ranges between 400- 1200 meter above sea level (msl) dominated by irrigated agricultural lands and settlements; (ii) the moderate mountain zone between 1,200 and 2,600 msl comprising grasslands, and forests; and (iii) the high mountain above 2,600 msl comprising sub-alpine and alpine meadows, rocky outcrops and at higher elevations, year-round snow and glaciers (see table 2). The main land degradation processes at work in Kyrgyzstan include soil erosion, salinization and swamping, chemical pollution, and destructive

<sup>&</sup>lt;sup>1.</sup> Average shortfall in consumption, defined as the distance from the poverty line for the total population below the line divided by the total population.

<sup>&</sup>lt;sup>8</sup> Kyrgyz Republic, National Poverty Reduction Strategy, 2003-2005, December 2002.

changes of vegetable covering. Each zone has problems of natural resource degradation conditioned by its geophysical and climatic characteristics which are compounded by excessive and inappropriate economic activity.

- 8. Rangelands and forests are the dominant land cover in the Kyrgyz Republic. The main categories of land use are: 80 percent natural pastures, 7 percent forests, 10 percent annual crops, 2 percent hay lands, and 1% orchards.9 Forest resources play an important role in water regulation, protection from soil erosion, conservation of biological diversity, and the stabilization of the ecological balance. Dependence on fuel wood use is potentially problematic and substitute energy source need to be explored to prevent the risk of severe deforestation in the coming years. Pastures located on slopes with steepness of more than 20 degrees are severely degraded by wind erosion. The prevalence of small cattle ranchers has led to transition from the pasturing of cattle at a distance from settlements to primitive shepherding which makes destructive use of pastoral land causing severe degradation. It is estimated that one million ha of forest land are eroded. Steep slopes, the absence of vegetative cover, and excessive stocking rates all contribute to the erosion problem. Arable land comprises only 7 % of land area. More than 51 percent of the 10.6 million ha of arable lands in Kyrgyzstan are affected by erosion. About 90% of cultivated crops are grown on irrigated sites with significant slope and as such are subject to washing off of soils estimated at losses of 15-20 tons for one irrigation from one ha. Salinization is widespread and determined by the structure of saliferous deposits and mineralized ground water. The area affected by secondary salinization has also increased considerably affecting to varying degrees two-third's of arable lands. Water is one of the most important natural resources in Kyrgyzstan, of which 90% is used for irrigation. <sup>10</sup> Lack of rational water resource management contributes to land degradation. Kyrgyzstan is a highly disaster prone country-earthquakes, debris flows, flash floods, landslides, rockfalls, avalanches, spring frosts, as well as glacial lake outburst floods. Thus risk management of natural disasters needs to complement programs to combat land degradation.
- 9. The natural conditions of Kyrgyzstan make it practically not possible to support agriculture without irrigation. However, in some regional and territorial features of the Republic, it is possible to practice rainfed agriculture, when the spring storage of water in the ground is enough to sustain the crops. This water is refilled afterwards by precipitations. Other rainfed lands are those with close ground waters, where irrigation will inevitably lead secondary salinity. The productivity of rainfed lands is lower than that on the irrigated lands. <sup>11</sup> The differential in incomes from 1 ha of irrigated land and 1 ha of dry lands is quite substantial as given in table 2 of Annex 2.
- 10. Forest resources play an important role in water regulation, protection from soil erosion, conservation of diversity, and the stabilization of the ecological balance. According to FAO statistics, the total forested area has not changed significantly between 1990 and 1995. However, introduction of commercial logging, though currently manageable, could cause irreparable damage to the mountain forests. Already, the state of forest ecosystems has appreciably deteriorated especially natural regeneration has practically ceased in the unique walnut and fruit orchards. Juniper forests in the south are reported to be shrinking at an annual rate of 0.7-0.9 percent. Dependence on fuel wood use is potentially problematic and substitute energy source need to be explored to prevent the risk of severe deforestation in the coming years, with particular focus on 'hot spots' in the southern forest region where fuelwood collection is excessive and causing forest degradation.

<sup>&</sup>lt;sup>9</sup> Source: ADB: Central Asian Environments in Transition, 1997, p.122.

<sup>&</sup>lt;sup>10</sup> See Country Situation Paper for more detailed discussion on various types of erosion.

<sup>&</sup>lt;sup>11</sup> Country Situation Paper, Sec. 5.6

<sup>&</sup>lt;sup>12</sup>UN- System, Kyrgyzstan, Common Country Assessment (CCA), Bishkek, 2001, p.118.

11. Rangelands and forests are the dominant land cover in the Kyrgyz Republic, covering 49 percent of the largely mountainous country. Natural pastures are about 9.1 million ha, of which approximately 30% are spring-autumn pastures, 25% winter pastures, and 45% summer pastures. Pastures located on slopes with steepness of more than 20 degrees are severely degraded by wind erosion. However, overgrazing has not been as intense as in the Soviet era. After independence in 1991, the number of sheep declined sharply, from 9.5 million animals in 1992 to 3.5 million in 1998. There was a substantial reduction of the number of cattle in 1994-95, though some increase in animal productions has been since registered. The prevalence of small cattle ranchers has led to transition from the pasturing of cattle at a distance from settlements to primitive shepherding which makes destructive use of agricultural land causing severe degradation. Despite the decline in livestock since 1991, the legacy of overgrazing during the Soviet period persists: (i) rainfall still causes topsoil loss and occasional mudflows in highly degraded areas, (ii) a large part of the pasture resource is in poor condition, with 15% now covered by non-edible or poisonous weeds and approximately one third dominated by less productive weeds. Overgrazing expands in the summer and spring/autumn pastures, especially those in proximity to settlements.

Table 2: Kyrgyz Republic: Ecological Zones

Tuble 20 Hiji gji i kepubilet Ecological Zones						
Zone	Altitude	Belt				
	(in meter above sea level (msl)					
Low Mountain	400-1,200 msl	Desert and Semi-desert				
		Steppe				
Moderate Mountain	1,200- 2,600 msl	Forest				
High Mountain	Above 2,600 msl	Sub-alpine and Alpine				
Source: ADB, Central Asian Environments in Transition, 1997, p. 111.						

#### B. Types of land degradation and underlying causes

12. As discussed in the preceding section, wind and water erosion, caused by a mix of natural and human factors, are the main cause of land degradation. However, as an upstream country, the Kyrgyz Republic faces certain peculiar challenges. Kyrgyzstan and Tajikistan share the majority of the mountains and depend to a great deal on these mountain resources since they have only a relatively small part of the fertile lowlands. They have also to live with the relative disadvantages of mountain areas as compared to the lowlands such as inaccessibility, marginality, fragility and climatic disadvantages. In addition, these countries have presently to carry the major share of the costs related to operating the water reservoirs and the main water conveyance system, which is also (or mainly) providing water to the downstream states. At present the predominantly mountainous countries receive inadequate compensation from countries downstream for the maintenance of water supply systems and small support for management of the upper watershed in favor of adequate water supply in the lowlands.<sup>15</sup>

## C. The economic costs of land degradation

13. Hard and structured data on the dimensions and types of land degradation, or estimates of the economic costs of land degradation were not readily available. The information available on extent of land degradation is mostly dated and is given in Annex 2. While it is difficult to put a dollar value on

<sup>&</sup>lt;sup>13</sup> Sections on forests and pastures based partly on: World Bank: Kyrgyz Republic Mountain Rangeland and Forest Sector Note, ECSSD Working Paper No. 33, September 10, 2001.

<sup>&</sup>lt;sup>14</sup> Between 1955 and 1985, the area of degraded pastures increased 1.58 million ha to 2.4 million ha.

<sup>&</sup>lt;sup>15</sup> ADB/CAMIN Working Groups: Regional Strategy and Action Plan for Sustainable Mountain Area Development.

environmental damage, a World Bank study on mountain and forest sector in Kyrgyz Republic estimates that the annual value with improved grassland yields would be 62% higher - som 23.84 billion (\$477 million) as compared with som 14.78 billion (\$296 million) based on poor grassland yields, as summarized in table 3:

Table 3: Potential Value of Rangeland and Mountain Pasture

	На	Ha (000)		Average DMYield kg/Ha		OM million)
	Poor grasslands	Improved grasslands	Poor grasslands	Improved grasslands	Poor grasslands	Improved grasslands
Spring	1,200	1,200	400	550	1,350	1,856
Summer	3,800	3,800	800	1,200	11,400	19,000
Autumn	1,200	1,200	400	550	900	1,238
Winter	2,000	2,000	150	250	1,125	1,750
Total	8,200	8,200			Som 14,775 US\$ 296	Som 23,844 US\$ 477

Source: World Bank: Kyrgyz Republic Mountain Rangeland and Forest Sector Note, ECSSD Working Paper No. 33, based on detailed estimates in tables 5a & 5b at p.23.

14. **To conclude**, the Kyrgyz Republic is rich in water resources, is endowed with limited but potentially productive arable land and plentiful of forests and grasslands. However, its productivity is severely constrained by serious land degradation caused by wind and water erosion, drainage and salinity problems, pollution caused by industrial discharge, deforestation and poor maintenance of rangelands. Out of 10.5 million ha of arable lands, 5.4 million ha (51%) are affected by erosion. In addition, 1 million ha of forest land are eroded. Steep slopes, the absence of vegetative cover, and excessive stocking rates all contribute to the erosion problem (ADB-1997). The two key constraints to combating land degradation are lack of financial resources and limited management capacity. Other contributory human-induced environmental risks are to the water and air quality from mine tailings and discharge of toxic wastes from industry and urban waste.

#### III. Implementation of the UNCCD

#### A. NAP process in the Kyrgyz Republic

15. The Kyrgyz Republic acceded to the UNCCD in December 1997. The Convention was ratified by the Jogorku Kenesh (Parliament) of the Kyrgyz Republic in 1999. The first National Forum on combating desertification was carried out in November, 1999, when Coordination Board on the Convention implementation was established. The Kyrgyz NAP was prepared through an inter-agency consultative process and with financial support of \$ 20,000 from the Convention's Secretariat. The NAP was approved on December 8, 2000. <sup>16</sup>

16. The English translation of the Kyrgyz NAP is not available. According to the Country Situation Paper, the NAP coverage is includes: geo-strategic position of the country, socio -economic situation, factors and scale of desertification, priority directions of projects and programs, proposals on pilot projects, legislative framework, and concept and plan of NAP implementation. However, the April 2002 Kyrgyz national report to the UNCCD seems to be relatively less focused on the technical aspects of the desertification processes, and pays a greater attention to the operational aspects of implementation, and identifies a number of project activities requiring external funding support. This orientation of the NAP

<sup>&</sup>lt;sup>16</sup> The NAP is available only in Russian, but the National Report on Combating Desertification (revised in April 2002) is available in English.

follow up is explained to some extent by the geography and geomorphology of Kyrgyzstan. Areas affected by all types of desertification in Kyrgyzstan are estimated at some 70, 000 km² (or 4.7% of the total area under deserts in Central Asia). There are virtually no sandy deserts in Kyrgyzstan. The main concerns are with regard to the condition and use of the resources vitally important to the Republic water resources, land, fauna and flora, forests and specifically protected territories.

- In Kyrgyzstan, NAP implementation has received budgetary support mainly for scientific research on monitoring of irrigation land salinization processes. The process of implementation is intended to place greater emphasis on involvement of farmers, farms and peasant farms, agricultural cooperatives, NGOs, women and youth organizations, and local self-administration bodies. The implementation strategy also aims to fully utilize decentralized structures of local governance, such as village committees to execute pilot activities. It also stresses the need to monitor experience and lessons from such pilots for replication and up-scaling and to be fed into policy & legislation at the national level. This bottom up approach is in line with the objectives of the CD Convention. However, the National Report on UNCCD (April 2002) points to one limitation which is the outcome of the land reforms. Since production decisions are now effectively in the hands of the farm units, the administration at the level of national and regional centers needs to adopt policy incentives, rather than administrative regulations, to promote rational resource management at the farm level. Moreover, distance and lack of transport facilities in mountainous terrain make active supervision from oblast and rayon levels extremely difficult. Thus, implementation of NAP must rely on electronic information and communication linkage between the Center and the periphery of the country. The Irrigation Research Institute has received technical assistance from FAO and USAID to establish operative communications via email and internet.
- 18. **To conclude,** the strategy for NAP implementation is sound, only there are as yet few concrete activities on the ground to translate the strategy into action, mainly because of lack of funds and weak management capacity. Also, many of the pilot project concepts need to be more fully thought through and better articulated in order to access grant financing from external sources.

#### B. The Focal Agency & Institutional Framework

- 19. A National Center to Combat Desertification (NCCD) was set up within the Kyrgyz Irrigation Research Institute of the Ministry of Agriculture, Water Resources and Processing Industry of Kyrgyz Republic. NCCD steered the NAP formulation, and is responsible under the NFP-CD for its implementation and generally for coordination of activities on combating desertification in the country. However, NCCD has no formal official status and now no funding support to carry on its functions effectively. The Irrigation Research Institute NCCD has developed and supports www.water.kg WEB-site, which the Coordination Body of CCD planned to use as information centre on the UNCCD implementation under support of USAID.<sup>18</sup>
- 20. The Focal Institution for NAP is in the mainstream of development policy and has extensive experience of dealings with the donor agencies. The National Focal Point for UN CCD, Dr. Kulov, is Director of the Kyrgyz Scientific and Research Institute of Irrigation. He is a dynamic leader with high standing within and outside the administration. The National Coordination Body of UNCCD is well represented by all concerned ministries, including representatives of the Ministry of Finance, and by NGO representatives. The NCCD serves the role of a dedicated Program Management Unit (PMU). Thus, in terms of institutional framework, UNCCD in Kyrgyzstan is well positioned for implementation, but needs strengthening to improve its performance.

<sup>17</sup> Dr. A.G. Babaev (ed.) Desert Problems and Desertification in Central Asia, Springer, 1999, Table 7.1 p. 81.

<sup>&</sup>lt;sup>18</sup> This website was made possible through support provided by the U.S. Agency for International Development's Mission to the Central Asian Republics, under the terms Central Asia Natural Resource Management Project.

#### C. Strengthening NAP process and participatory approaches

- 21. The NAP process, and more particularly the office of the NFP/National Coordinator for UNCCD needs urgent support in the following areas:
  - (i) Government needs to confer official status on the National Center to Combat Desertification (NCCD) and provide it with a formal budget line. The situation of its staff should also be formalized.
  - (ii) The NFP, as national coordinator for UNCCD and Secretary of the NCB, needs equipment and expertise in areas such as electronic communications, computers, translation and interpretation and hiring of expertise from the private sector, including NGOs, with a view to preparation of proposals or materials for dialogue with the donor community. The stringent fiscal situation does not permit budgetary allocations to meet these urgent needs for the effective implementation of UNCCD in the Republic. The access to technical assistance grants from donor agencies would require the NCCD to be able to prepare project concepts and proposals as basis for a meaningful dialogue with interested donor agencies. It does not currently possess the necessary project development capacity, or even translation facilities, to undertake such dialogue effectively.
  - (iii) Capacity building support to the focal institution is needed in the skill areas such as program and project development, training and exchange visits. Program development support may particularly focus on preparation of concept notes and project proposals relating to addressing land and water degradation in order to approach potential donor agencies, including GEF.
  - (iv) In the short-term, funds are needed for strengthening the office of the NFP to mainstream his activities into the government decision-making processes. For instance, the status of the NCB needs to be formalized so that it can submit its recommendations/ issues relating to NAP/CCD implementation to the regular economic sessions of the Government intended for the solving of multidisciplinary problems. The NFP requires urgent *bridging* grant funds (from interested development partners) for engaging experts, as short-term consultants, even for the preparation of materials to the NCB and economic sessions of the Government. After the Tashkent meeting Mr. Kulov provided an estimate of his requirement for grant funds in order to strengthen his ability to speed up NAP implementation. This is provided in table 4 below.

Table 4: Proposed annual budget for the office of NFP/NC-UNCCD

	Annual budget for the maintenance of the NC CCD					
?	Purposes	Sum in USD	Months	Sum total in USD		
1	Salary					
	Coordinator, developer of tasks	200	12	2400		
	Assistant-translator	150	12	1800		
	Interim experts	150	6	900		
2	Communication (E-mail, Internet, tel.,)	100	12	1200		
3	Miscellaneous (cartridges, stationery)	50	12	600		
4	TOTAL:			6900		
Source: Email from Dr. Kubanychbek Kulov, November 3, 2002.< kulov@elcat.kg>						

<sup>&</sup>lt;sup>19</sup> According to the NFP, even a modest annual grant financing of US\$ 6 -7, 000 per year would help improve the functioning of his office.

- 22. 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. Strengthening the policy and programmatic content of the Action Plans to implement these Conventions, including that of the CCD-NAP, would catalyze collaborative activities around concrete action areas. Such collaboration must be conceived within the CDF/NPRS framework. Mere emphasis on establishing formal administrative mechanism, important as they are, would not be a sufficient condition to promote synergies. Mainstreaming is a key issue for all the conventions and could be a basis in determining areas of synergy for mutual collaboration. Priorities for mainstreaming should be based on: (a) potential returns due to the physical magnitude of the problems; (b) institutional feasibility considerations; and (c) estimates (even back of the ewelop estimates) of relative economic costs and 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.
- 23. **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, NPRS, 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, such as community-based local area development projects (LADPs), as well as crosssectoral investment projects of other concerned agencies which incorporated land degradation concerns.
- 24. The NAP process in Kyrgyzstan places considerable emphasis on participation of farmers and their associations, such as he water users' associations, and NGOs. The policy environment in this respect favors participation (see para 19). *The Focal Institution plans to use information technology as an instrument to promote active participation of the rural communities in the program activities to combat desertification.*<sup>20</sup> At present all rayon and oblast structures of Department of Water Resources are equipped with computers under the Irrigation Systems Rehabilitation Project (WB). The Irrigation Institute will connect E-mail and Internet for establishment of operative communication between Centre and periphery of the country at the assistance of FAO<sup>21</sup> and other potential donors. The following three pilot projects on extension of participation with using information technologies are being developed:
  - Information system of agricultural producers support;
  - Connection of Kyrgyz rural periphery to information network for improvement of
  - economic base, education and culture;
  - Increase of rural population access to agro-ecological information through mass media.
- 25. **Strengthening participatory approaches.** There are more than 2,000 NGOs registered in the Kyrgyz Republic according to the Ministry Justice, and about 1,092 active NGOs according to the

This is in line with the Government's policy on EGovernment as set out in the NPRS: Information and communication technologies will be actively used to reduce bureaucracy and increase transparency of decision making and implementing on all levels of public administration. This will help to enhance and expand direct communication and ensure effective feedback between the society and the public administration.

<sup>&</sup>lt;sup>21</sup> National Report on Combating Desertification (revised in April 2002)

Counterpart Consortium. <sup>22</sup> However, local NGOs active in the development show a large degree of dependence on donor or international NGO programs. Some of them are technical service providers with skills in running training programs or other forms of consultative intermediation to facilitate interface between a donor agency/international NGO program and the local beneficiaries. GTZ/GM has initiated activities to train local NGOs in social mobilization skills in Central Asia, but Kyrgyzstan has yet to be covered by this program. Three areas where NGOs are active in rural development relate to irrigation Water Users Associations (WUAs), drinking water supply programs, where an NGO may help establish CBOs, such as Community Drinking Water Users Union, or in development of micro-credit institutions and credit unions. As mentioned in the Interim National Strategy for Poverty Reduction (I-NSPR), there are more than ten organizations extending micro-credits to residents in Kyrgyzstan, with branches located in all of the oblasts. But such Credit Organizations and NGOs spend significant resources on training seminars and consultations on similar issues. On the other hand, there is no mechanism that would allow creditors to exchange information or credit status assessment of clients.

26. Kyrgyz Republic has adopted the policy of empowering institutions of civil society that are capable of implementing certain state functions with greater efficiency than can government agencies and structures. Under the CDF framework, coordination committees have been established to supervise areas of sustainable economic growth, social protection and human development, and effectiveness and transparency of state governance. The coordination committees have formed 23 working expert groups. All regions and Bishkek City have regional councils that coordinate the activities of expert working groups. Members of these coordination and working units include representatives of all elements of government and the civil society.<sup>23</sup>

27. In the context of UNCCD implementation, four main issue areas emerge in respect consolidating participatory approaches:

- It is perhaps a valid hypothesis that the role of NGOs has not moved much farther beyond the advocacy and awareness building phase. It is necessary that NGOs get involved in promoting community based local area development initiatives aimed at participatory control of land degradation tailored to local problems.
- There is need for closer relationship between NGOs and local government administration at the level of oblasts (provinces), rayons (districts), and villages and settlements, so as to generate more home-spun initiatives. Grameen Bank in Bangladesh would be a good role model.
- The participatory mechanisms involving local communities in the management of common property natural resources, or maintenance of desertification control assets are still in the stage of evolution. It is useful to study the legislative regulatory measures which may be necessary to provide an enabling environment for promoting such mechanisms. For instance in the case of Water Users Associations, Kyrgyzstan has a Law # 38 "On Unions (Associations) of Water Users."
- Gender inequality is an issue in Kyrgyzstan as women's role in society has diminished as evidenced from the fact that the percentage of women in the Parliament decreased from 30 percent to only 4 percent (CCA, p.41). It is necessary that NGOs play a more active role in increasing participation of women in local governance structures and in pilot projects to combat land degradation.

<sup>&</sup>lt;sup>22</sup> UN-System- Common Country Assessment (CCA), p.12.

<sup>&</sup>lt;sup>23</sup> Kyrgyz NPRS, Introduction.

<sup>&</sup>lt;sup>24</sup> See Annex 5 to the Country Situation Report of Kyrgyzstan on this law.

#### IV. Policy framework

- 28. The main policy issues in the context of UNCCD are:
  - A. Macro Policy Agenda
  - B. Strategy for Poverty Reduction
  - 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

The Kyrgyz Republic NPRS stresses the Government's objective to achieve dynamic growth of economy through effective implementation of structural reforms. It notes that in future, to ensure more stable and secure reduction of poverty, it is necessary to diversify the structure of economy and mobilize savings to finance investment. To lay the ground for this transition special attention in structural policy will be paid to public administration reform, further adjustments in the banking sector, as well as development of quality management in export-oriented sectors. The CIS-7 Initiative of the major IFIs -IMF, World Bank, ADB & IBRD- to promote poverty reduction, growth and debt-sustainability in seven low-income CIS countries<sup>25</sup> emphasizes that in the case of Kyrgyz Republic the priorities for future economic growth and poverty alleviation comprise the following policy reform agenda: (a) the external debt problem should be controlled through fiscal consolidation; (b) the framework to prioritize public expenditures must be established; (c) in particular, the level and composition of social spending needs to be reviewed; (d) the restructuring and privatization of the remaining large state-owned enterprises is critical not only to the debt management strategy but also because their poor performance places a significant drag on potential output growth; (e) the hydro-power resources of Kyrgyzstan could be exploited more efficiently to produce low cost electricity supplies through better upkeep of its infrastructure and hydro-power assets generating electricity; (f) reform of agricultural sector is important to increase agricultural productivity and promote rural growth; (g) create a more favorable business environment to promote greater foreign direct investment to the private sector; and (h) work to improve regional cooperation to promote intra-region trade necessary to exploit its export opportunities. Government is in agreement with these reforms but is handicapped by weak administrative capacity to manage the problems of transition, and by lack of financial resources to cushion the negative impact of drastic reform and restructuring.

30. **Managing the Debt Problem** The country's medium term growth prospects are mixed since the country still faces a number of challenges, such as high external debt burden, weak public finance and weak prospects for major export growth. Therefore, the public sector continues to place considerable reliance on external borrowing, grants and humanitarian aid to sustain the momentum of reforms. On the problem of high foreign debt, the Kyrgyz Republic was able to reach its first agreement with the Paris Club in March 2002. The agreement restructured \$ 99 million of principal and interest (including \$ 23 million of ODA) falling due from December 2001 to December 2004. Creditors also committed in principle to consider a stock-of-debt treatment, subject to successful implementation of the IMF program until December 2004. An important policy implication of the sustainable debt management strategy is

<sup>25</sup> Armenia, Azerbaijan, Georgia, Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan.

<sup>&</sup>lt;sup>26</sup> World Bank, Global Development Finance 2003, Annex: Debt Restructuring with Official Creditors. *ODA loans are to be repaid within 20 years (including 10 years of grace), at an interest as favorable as those applying to concessional loans.* 

that the Government would keep its public investment program under tight control, and prefer grants and highly concessional funds to loans on market rates. In this context, **public expenditure management** reform is a key focus of the World Bank's programs in the CIS-7. The thrust of these programs is to help ensure that public resource use reflects scarcity and PRSP priorities, given external debt and domestic revenue constraints.<sup>27</sup>

#### **B.** Strategy for Poverty Reduction

- 31. The Government of the Kyrgyz Republic, in order to move forward with its development and reform agenda has adopted two basic policy frameworks. The first is the Comprehensive Development Framework of the Kyrgyz Republic to 2010 which sets out the main goals and contours of its long term national strategy. The second is a more incisive medium term strategy framework called the National Poverty Reduction Strategy (NPRS) defining in greater detail its policy and program goals for 2003-2005. This document builds on the Interim National Strategy for Poverty Reduction (I-NSPR), which covered the period 2001-2003<sup>28</sup> (see Box1). This is a participatory exercise involving the Government with considerable preparatory assistance from the World Bank, IMF, ADB<sup>29</sup> and other development partners. The NPRS provides a more thorough assessment of the scale and nature of poverty in Kyrgyzstan. The main issues relating to poverty reduction situation highlighted in the report are:
  - A notable feature of poverty distribution is that rural poverty is higher than it is in urban areas (see table 2).
  - No improvement has been observed in the level of unemployment an important poverty factor. Further, the unemployment rate among women remains higher than that of men.
  - Due to the inadequate development of infrastructure, utility services are less available to poor households and to families living in rural and mountainous areas. Electricity is practically the only utility provided to the whole population.
- The mission of the poverty reduction strategy is "to expand the opportunities for each citizen to have an adequate, equitable, and comfortable life in the Kyrgyz Republic". This suggests that Kyrgyz people are not poor because they cannot provide for themselves, but more because they lack opportunities. The NPRS process aims to provide and expand these opportunities. On the whole it is directed at: (i) systemic impact on poverty factors; (ii) enhancement of positive developments; (iii) sustainable development; (iv) preventive action; (v) self-mobilization process; (vi) active use of domestic resources; and (vii) consolidation of the society. Two strategies are envisaged for implementation of the mission. These are: the stabilization strategy and the development strategy. The main goal of the stabilization strategy is to achieve manageability of resources. This implies maintaining political, economic and social stability through provision of various forms of security (food, energy, financial, information and ecological security). The main goal of the development strategy is to ensure that the present supports the future, while the efforts for the better future support the present. This implies aiming at a quality leap in development through mobilization of domestic resources, effective use of structural reforms and quality management. The objectives of the strategy also include bringing in professional managers to foster the development of economy, improvement of infrastructure, introduction of new technologies and information systems, as well as active involvement of civil initiatives in the country's development.
- 33. **Decentralization of public administration.** Decentralization aims to develop local democratic institutions in the form of local government units elected and managed at the local sub-rayon level, called

<sup>28</sup> It is usually referred to in the development literature as PRSP – i.e. Poverty Reduction Strategy Paper.

<sup>&</sup>lt;sup>27</sup> IMF, World Bank, EBRD and ADB, Report on Progress Under the CIS-7 Initiative, April 7, 2003.

<sup>&</sup>lt;sup>29</sup> ADB has provided technical assistance for the analysis of the Government's Public Investment (PIP) program, and is collaborating in the work on setting up a systematic PIP Monitoring and Evaluation System as part of the budget cycle.

in Kyrgyzstan, "local self-government (LSG). The core of LSGs is to be found in the local councils (keneshes) that coordinate activities of public administrations, territorial self-government and private structures. LSG has become an important aspect of the development of civil society and an important part of public administration. LSG bodies provide sizeable support to state agencies in stabilization of local political and social situations, resolution of social and economic issues, and reduction of poverty. There are now 487 village governments, city administrations and councils, and the same number of local councils throughout the Republic. A total of 8,184 deputies of various levels were elected throughout the country. The Law on Local Councils and other LSG bodies has significantly raised their role in the conduct of democratic government administration. As part of this process, the NPRSP also envisages building of partnership and participation of all stakeholders in areas such as: (a) dissemination of information; (b) conducting regular consultations and discussions; (c) Broad involvement of all structures in implementation, monitoring and evaluation; (d) increasing of responsibilities of concerned structures; and (e) orientation to the result attaining. These policy elements of decentralization are of direct relevance to increasing the outreach of the activities and projects to combat land degradation with active participation of civil society and local governance structures at the grassroots. This would also help promote mainstreaming of NAP/CD into the PRSP process (see Box 1).

# Box 1: I-NSPR- Matrix of Measures for the National Poverty Reduction Strategy particularly supportive of realizing UNCCD objectives.

#### Macro-economic policy

- 1. Achieve and maintain price stability.
- 2. Introduce a tax on the use of subsoil by amending Tax Code

#### Structural Reform

3. Improve financial intermediation- presumably including micro-finance for the rural communities

#### Infrastructure

- 4. Enhance land-improvement and irrigation condition of fields: partial restoration of irrigation infrastructure and repair of damaged dams.
- 5. Improve systems of irrigation water distribution and supply to farms.
- 6. Improve the system of payment of water use domestically and abroad.
- 7. Stimulate water users associations to compensate costs and provide supervision over the management and maintenance of irrigation assets by water users.

#### Agricultural sector

- 8. Improve agricultural production technology
- 9. To undertake agrarian and land reforms, to develop the markets of a private land holding and leases of agricultural lands.
- 10 To finish privatization of seed farming, pedigree farming and other agricultural enterprises and restructuring of collective farming.
- 11. Expansion of a network of consultation services to the farmers
- 12 improved market intelligence and access of the farmers to information.

#### Decentralization

- 13. To develop the strategy and program for decentralization and development of local self-government, with associated legislation.
- 14. Acceptance of the laws regulating republican and the local budgets and optimizing a tax system

#### **Social Protection**

- 15. To increase access to the programs of preschool and school education.
- 16. To ensure targeted support to the children from the socially unprotected stratum of the population.
- 17. Access to public health services.

#### **Employment creation**

18. Develop social partnership in regulation of employment promotion issues.

#### **Regional Development**

- 19. Set up a system for training and retraining staff for local self-government on the principle of "from bottom up".
- 20. Narrow the gap in extent of gap between regions.
- 21. Increase coverage of rural area population with centralized water supply system services.

#### Environment

- 22. Review and introduce a public program on environment protection and rational use of natural resources.
- 23. Provide monitoring over quality of air; pollution of surface and subsurface water; environment radioactive pollution; and use of natural resources.

Note: Policy dialogue should focus on more explicit in corporation of land degradation control measures in the matrix and in the main NSPR.

Source: I-NSPR-Appendix 1-p 53-63.

#### C. **Legal Framework**

- 34. There are a number of laws which already exist in Kyrgyzstan that are of direct relevance to the implementation of the UNCCD (see Box 2). The RETA domestic consultant has provided with her Country Situation Paper an English translation of a number of these laws in Annex 1-7. These should be helpful in undertaking detailed analysis of the legal framework. A significant provision in the case of Kyrgyzstan is the amendment to Article 4 of the Constitution<sup>30</sup> of the Kyrgyz Republic. It now provides that "land can be in state, municipal, private and other patterns of ownership". However, it prohibits ownership rights to foreign legal or physical persons. In general, it has been observed that the main characteristics of the legislation in Central Asia, including in Kyrgyzstan, are:<sup>31</sup>
  - characteristics of the competence of the government bodies in management, use, and conservation of a natural objects, and division of functions between the Government, ministries, regional and local government bodies is carried out;
  - The rights for natural resource use, types of use, terms, nature use licensing, duration of use, natural resource monitoring procedure, its cadastre, structure, and the system of payments;
  - Measures of legal responsibility for the breach of these laws; and
  - International cooperation in conservation and use of natural resources
- 35. 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. Legislative reform, reviewing the old and outdated acts and passing new ones, is an ongoing process. The new legislation is strongly influenced by the practices of the former Soviet Union republics. Framework laws prevail, frequently requiring governmental regulations for their implementation and enforcement. At times, administrative decisions move faster than their legal backup through legislative changes. The objective in the legislative area is to stabilize and create a favorable legal and institutional environment; raise the effectiveness of law making; streamline existing laws; and in general improve the legislative framework. The priority areas of the forthcoming legal reforms include: development of the law-making concept, streamlining of existing legislation; improvement and revision of the second generation market regulations - laws and other legal documents adopted in the period between 1995 to 1999; and accessibility of all legal documents for citizens, private sector, , and local authorities.<sup>32</sup> There are a number of new laws to be adopted under the CDF (see Annex 3). The list includes laws: (i) On Volunteership; (ii) On Local Self-Government's Finance Principles; and (iii) On Communal Ownership for Land and Other Natural Resources.

<sup>&</sup>lt;sup>30</sup> Annex 6 gives the provisions relating to Land issue in the Constitution of the Kyrgyz Republic.

<sup>&</sup>lt;sup>31</sup> Vladimir Mamaev, Ph.D., Woods Hole Group, Inc., Sustainable Development in Central Asia: Assessment and Challenges of Agenda 21, Zero Draft Report, August 16, 2001.

<sup>32</sup> Kygyz NPRS

## Box-2: The existing legislations of Kyrgyz Republic relevant to the implementation of the UN Convention to Combat Desertification in Kyrgyzstan.

Law of Kyrgyz Republic "About introduction in an operation of the Land code of Kyrgyz Republic" from June 2, 1999 N 46;

Decree of Government of Kyrgyz Republic "About monitoring of the land for agricultural purpose of Kyrgyz Republic "from March 1, 1999 N 115;

Statement about monitoring of the land for agricultural purpose of Kyrgyz Republic;

Forestry code of Kyrgyz Republic from July 8, 1999 N 66;

Law of Kyrgyz Republic "About peasant and private farms "from June 3, 1999 N 47;

Law of Kyrgyz Republic "About the local self - government and local state administration in Kyrgyz Republic" from April 19, 1991 N 437-XII;

Law of Kyrgyz Republic "About accession of Kyrgyz Republic to the UN Convention to combat desertification in countries, which seriously affected to drought and / or to desertification, especially in Africa "from July 21, 1999. Law of Kyrgyz Republic on Environment Protection dated 16 June 1999 No 53

Law of Kyrgyz Republic on Water Users Associations dated 15 March 2002 No 38 Source: NFP-UNCCD

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

There is considerable common ground in the environmental policies and the issues involved in 36. combating land degradation/desertification. Natural Resource Management practiced in agriculture, irrigation, forestry and pastures have contributed to the problems of land and pollution. The most dangerous factor that has resulted in the depletion and degradation of water resources, especially of potable water - a strategic resource - is pollution by various chemical and organic substances. In Kyrgyzstan, the environmental pollution is basically caused by mining industry wastes (130 objects); the composition of wastes includes unhealthy salts of heavy metals. About 75 million cubic meters of wastes are stored in 49 tailing pits (754 hectares) and slurry tanks. 33 There are numerous mountain dumps formed by overburden operations that contain toxic substances in huge quantities. According to available data, the average cropping capacity of grassland decreased by 14 percent during the period from the 1970s to the 1990s. A significant part (about 25 percent) of pastureland is affected by medium or high-level degradation. The abrupt reduction of the number of cattle in the Republic that has taken place in recent years did not solve environmental problems connected with cattle gazing. 34 The Kyrgyzstan NSPR states that ensuring long-term ecological sustainability is a factor of special importance directly influencing the achievement of steady results in poverty reduction. The National Environmental Action Plan (NEAP) was approved by the Government in 1995. The Republic's Constitution provides for the right of each individual to an environment favorable to life. The environment conservation development strategy is to be based on two fundamental principles: the principle of integration of economic and environmental policies and the principle of individual responsibility. Within the framework it is important to adapt the legislation on nature conservation to the conditions of the transition economy. It is equally important, to harmonize the national legislation of the country with international legal documents. It is intended to draft new laws in the area of environment protection and revise the regulatory and legal framework in compliance with international standards. In this connection it is planned to draft the Law of the Kyrgyz Republic on Environmental Insurance.

\_

<sup>33</sup> Central Asia REAP - Section on Water Pollution

<sup>34</sup> Kyrgyz NPRS

37. An environmental performance review of Kyrgyzstan by the UN-Economic Commission for Europe concludes that a system of executive bodies responsible for environment protection and the regulation of the use of natural resources have been set up in Kyrgyzstan. "The solution adopted for shaping the environmental administrative system is quite adequate". It further recommends that in view of decentralization in Kyrgyzstan, the problem of capacity-building for environmental management at all levels concerned – national, regional, local, industrial – needs to receive sufficient attention. <sup>35</sup>

#### E. **Agricultural Policies**

- 38. The most serious issues facing the agriculture sector are low productivity, farm units operating inefficiently as subsistence farmers, and increased rural unemployment. For increasing agricultural productivity, it is necessary to improve the supply of inputs and technical support services through the private sector, as the public sector is in no position to manage such services. Thus, it is necessary to develop input supply markets, improve infrastructure and promote private service providers. The strategic public-private sector mix would involve private sector handling seeds, machinery and fertilizers, while government taking care of rehabilitation and maintenance of main irrigation channels, while shifting the responsibility for on-farm irrigation to farmers.
- 39. In 2000, there were 57 state farms, 605 collective farms, and more than 60,000 individual and peasant farms in the Republic. The percentage of land given over to farming increased by six times over 1992, and amounted to more than 715,000 ha. <sup>36</sup> At the same time, the yield capacity of many agricultural crops has declined. So did the number of farm animals. The revival of agriculture has been fitful and supply response to price and subsidy incentives have been uncertain. More than 90% of total agricultural products are produced by farmers and peasants, about 8% by collective farms and less than 2% by state farms. Data of agricultural production given in the Country Situation Paper shows some revival since 1999, but the underlying constraints still persist. According to I-CSPR rural income per capita has fallen substantially despite the recovery in agricultural production and despite agricultural value added being some 5% above 1990 levels. Part of the problem is that agricultural producers still do not have sufficient knowledge and skills on marketing and finance, and the environment for new entries of agri-services and agri-businesses has deteriorated substantially due to local and national bureaucratic procedures.<sup>37</sup> On the positive side, private land ownership has been introduced and experience has been gained on distribution and transfer of natural pastureland to be leased by local communities responsible for the condition of pastures and the degree of their degradation, rotation and reclamation. Nevertheless, crop capacity of arable land is declining every year.<sup>38</sup>
- The Kyrgyz NPRS explicitly recognizes the serious problem of land degradation: "Out of 10.6 million hectares of agricultural land, more than 88 percent is recognized as degraded and subjected to desertification. The area of secondary soil salinity makes up 75 percent of the total arable land of the Republic. Kyrgyzstan acceded to the UN Convention on Fighting Desertification and developed and Action Plan to fight desertification". The NPRS proposes that to promote the rational use of land resources, it is necessary:

<sup>38</sup> Kyrgyz NPRS.

16

<sup>&</sup>lt;sup>35</sup> UN Economic Commission for Europe, Committee on Environmental Policy: Environmental Performance Reviews, Kyrgyzstan, UN Geneva, 2000, p.11.

<sup>&</sup>lt;sup>37</sup> Deficiencies in taxation, such as high effective VAT rates on processing and trading, imposition of VAT on seeds and fertilizers; Excessive regulation, such as licensing and reporting requirements; Government involvement in trade, such as procurement of agricultural inputs and commodities.

- to develop the cadastre of the quality of land resources in order to encourage the formation of an orderly market for land;
- to carry out a series of measures to reduce degraded lands by 5 percent each year;
- to carry out monitoring and evaluation of pasture lands in order to introduce a rational pasture land rotation system and regulated cattle grazing;
- to increase the volume of processing and neutralizing of solid waste to 1 million tons each year, starting in 2003;
- to increase the volume of capital investment for soil conservation to 60 million **soms** by 2005:
- to preserve and broaden the area of forest-covered and specifically protected territories, by developing the national network of specifically protected territories, increasing them by 25 percent by 2005; and
- to increase the area of forestland in the Republic up to 6 percent by 2010 (State Forest Program).

#### F. Water Conservation Policies

- 41. 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:
  - 1. Irrigation water use efficiency issues.
  - 2. Domestic water distribution issues.
  - 3. Freshwater and potable water supply.
  - 4. Regional water sharing policies.
  - 5. Issues of water pollution.
- 42. ADB and IDA have through their programs supported the development of water user associations (WUAs), with focus on WUAs providing an organizational structure in which farmers come together to make joint decisions about irrigation and drainage and to contract and negotiate with government agencies involved in water supply and responsibility for maintenance of main water distribution channels. In this connection, the law on water users associations is a step forward. The main issues which need particular attention are:
  - Provision of long-term water rights (rights over on-farm irrigation facilities) to farmers and WUAs:
  - A decentralized policy on irrigation service fees (ISF), rather than such fees being determined by Parliament;
  - Allocation from the state budget of sufficient funds for operation & maintenance (O&M) of the main channels, rather than imposing excessive irrigation charges on the WUAs.
- 43. **Issues of water resource management.** Water is one of the most important natural resources in Kyrgyzstan, comprising 50 cubic km/year of river flow, 1 3 cubic km/year of potential sub-soil water reserves, 1,745 cubic km/year of lake water, and 650 cubic km/year of glaciers. The country uses 12-17 % of the available fresh water, of which 90% for irrigation. There are fifteen large water reservoirs and 24 smaller ones in the Kyrgyz Republic. The mountains of Kyrgyzstan feed a large number of transboundary streams and drain into other Central Asian countries. The two key rivers are Syr Darya and Amu Darya which drain into the Aral Sea. The water allocation schemes from the Soviet times still determine the water sharing arrangements between CARs, which raises the issues of regional cooperation discussed later in this section.

- 44. Water use inefficiencies are attributable to a number of factors deterioration of storage and irrigation infrastructure involving sedimentation and 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. **Access to safe potable water is another important issue**. Use of water from open water sources results in disease. In urban areas, 90.2 percent of the population has access to tap water, while in rural area, only 19 percent. Only 15 percent of the population has access to sewerage networks. The volume of capital investment for protection and rational use of water resources is annually decreasing.<sup>39</sup>
- 45. **Issues of water sharing with other CARs.** The plan for the division of exploitable water reserves among republics was made during Soviet times. Supplies of oil, gas and other power sources were shared. After independence, neighboring countries of the Kyrgyz Republic have exploited their supplies of gas and oil to their advantage. However, the Kyrgyz Republic had to abide by the existing water agreements with other countries. These arrangements are considered not being the most appropriate from the Kyrgyzstan's perspective:
  - It is unable to maximize its potential for cheap hydroelectric power, since the neighboring countries need water for irrigation during summer, while Kyrgyzstan would like to release water to produce electricity in winter, when its demand for energy is the highest.<sup>40</sup>
  - In the south, the water quotas left to Kyrgyzstan are too small to allow for the expansion of agriculture.
  - Finally, Kyrgyzstan has the responsibility for maintenance of water infrastructure in its territory reservoirs, dams and channels, without any compensation from its neighbors, who are the main beneficiaries of the current water sharing arrangements. Kyrgyzstan pays for import of gas & oil, which is the natural resource of the down-stream cars, but is unable to get any financial support from those countries for sharing its water.
- 46. In the above context, there are periodic discussions between the CARs at the highest levels of Government, but many issues remain to be resolved in an area which is politically quite sensitive. Some progress has been made through bilateral discussions. For instance, the 1998 Syr Darya Agreement between the Kyrgyz Republic and Kazakhstan provides for sharing O& M costs between the two countries.

<sup>&</sup>lt;sup>39</sup> Kyrgyz NPRS.

There is a technical issue about the methodology of estimating water flows which is under consideration by Kyrgyz experts. In the context of intensive agriculture practiced in the region, the demand for water is increased for providing of guaranteed harvest in arid zone. In this connection, for the estimates of water flows, reliable forecast is indispensable in the field of climatology and hydrology on future 10-20 years with the purpose of working out not only the measures of water resources for regional use, but also definition of actual water volumes at intergovernmental water division. At developing of the climatic scripts and flow forecasts of the 21 century, it is common to use global climatic models advised by an International commission of experts on climate change ?? ?/????. The preliminary expert examination on applicability of these models to Tyan-Shan area has shown that they have global nature and local orographic conditions do not allow at all and consequently are insufficiently effective for practical use in Kyrgyzstan. The Kyrgyz experts feel need for a more thorough scientific study of these issues and development of region-specific models (based on the issue raised during the consultant's discussions in April and clarification provided by Mr. Kulov in his email of 24 July 2002.

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

47. Evolving a cohesive strategic framework to combat land degradation can best be handled as an integral part of the government's development planning and budgetary process - an issue which underscores the crucial need for mainstreaming of UNCCD implementation, which was discussed in the previous section. The Government of Kyrgyzstan has been the most open, among the CARs, to adopt policies of liberalization and deregulation. It has also in place the basic framework for a cohesive development strategy in the form of the Comprehensive Development Framework (CDF) and poverty reduction strategy (NPRS). Therefore, the NFP needs to establish a closer interface between the UNCCD/NAP and the national development policy framework. The best entry points for this would be focusing on measures which address land degradation problems in the context of improving agricultural productivity and promoting efficient water use. This should be relatively easy since the responsibility for UNCCD implementation lies with the Ministry of Agriculture. Water Resources and Processing Industry (MAWRPI). However, it needs to be realized that there is a broad environmental agenda and national action plans of the other environmental conventions which must compete with other important priorities highlighted in the NPRS. The most pragmatic approach perhaps would be for UNCCD-NFP to collaborate together with the Focal Points of other environmental National Action Plans and aim for a harmonized platform for action to link up with the CDF and NPRS framework. This would pave the way for evolving a coherent and synergic strategic framework to combat land degradation to address the UNCCD related issues and actions in a holistic manner.

#### V. Priorities and Programs to Combat Land Degradation

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

48. The main priority areas requiring urgent preventive measures to control land degradation in Kyrgyzstan are:<sup>41</sup>

- water erosion as a result of irrigation and precipitation on slope lands, salinization
- and swamping in lowlands causing problems of management of crop lands;
- overgrazing of pastures, declining fodder availability and deteriorating fodder quality causing problems of management of pastoral lands;
- felling down of forests for fuel and as a consequence, wind and water erosion, and landslides causing problems of forest and upper watershed management.
- 49. In terms of program development, this implies identification of pilot projects focused on:<sup>42</sup>
  - Rational use and protection of land resources. Special attention to be given to integrating land and water resources management in upper watershed.
  - Establishment of national and regional market intelligence information system in Central Asia for agricultural producers' support, with easy access by farmers about prices and production, and information about available volumes of production in the main markets both inside the countries and between the countries, and in the world market.

-

<sup>&</sup>lt;sup>41</sup> Kyrgyzstan: Revised National Report on Combating Desertification (April 2002).

<sup>&</sup>lt;sup>42</sup> This summary pieces together various ideas in the National Report and proposals from Mr. Kulov, the National Coordinator (NFP). The Executing agency would be: Kyrgyz National Center (KNC) for the implementation of UNCCD. Contact: <a href="https://kulov@elcat.kg">kulov@elcat.kg</a> T. 996-312-54.1168; Fax: 996-312-54.0975. Address: 4a Toktonalieva Str., room 209, Bishkek, Kyrgyzstan-720055

- Enhancement of the capacity of village communities for eco-tourism management in the Kyrgyz section of the Great Silk Road, which would generate resources for development and incentives for controlling land degradation.
- Development of a system of monitoring (and inventory) of agricultural lands, pastures, and water use;
- Reafforestation, <sup>43</sup> protective afforestation, and alternatives to firewood in rural areas:
- Internet connectivity of Kyrgyz rural periphery to information network for improvement of economic base, education and culture; and increase of rural population access to agroecological information through mass media.
- Research and extension to test and promote application of modern methods of determination of the mode of crop irrigation, and prevent unproductive over-use of water, water logging and salinization of lands;
- A regional program, with GEF financing, for sustainable management of mountain pastures in Central Asia
- 50. There is no dearth of project ideas in Kyrgyzstan, but program development is handicapped by three key constraints – weak program development capacity, limited finance, and lack of a well conceived portfolio of projects. This implies need for urgent support in the following areas:
  - The NFP/CD needs capacity building support, particularly of trained staff to prepare (i) concept papers to concretize project ideas into proposals for technical assistance/ grant financing from potential donors.
  - Such pilot proposals must be identified in consultation with rural communities, local self (ii) government structures, and Rayon and Oblast authorities, under decentralized governance modalities.
  - Investment projects, requiring borrowing from IFIs, even on concessional terms, would (iii) need stringent scrutiny for inclusion in the government's public investment program (PIP), because of the debt management problems.
- The Problem of Financing Priority Programs from domestic resources. The Kyrgyz Republic is currently passing through severe budgetary constraints even to meet its current expenditure, much less to finance its development programs. According to projections of application and broad funding sources under the CDF Strategy 2000-2010, its total state budget expenditure in 2001 was 17.7% of GDP and is projected to be reduced to 16.8% of GDP in 2004. Its development budget (PIP) for 2001 was 7.0% of GDP and is projected to be restricted to 4.2% of GDP. For its economic growth, the economy would rely much more heavily on private sector investments, which are projected to rise from 9.7% of GDP in 2001 to 14.4 % in 2004. Bulk of private sector investment in 2004 is to be financed by domestic savings (9.4% of GDP), with foreign direct investment covering the balance (5.0% of GDP).
- The implications of the above budgetary scenario for financing of priority projects/and programs are that possibilities of allocating significant domestic resources to implement CCD/NAP seem to be very limited. Such financing would have to be arranged mainly through internal switching of budgetary

<sup>&</sup>lt;sup>43</sup> In Kyrgyzstan, the problem that requires taking specific measures is to rejuvenate forests by way of restoring, cutting matured trees and planting the new ones.

allocations, combined with cost efficient use of such allocations. Since the programs to combat desertification/ land degradation fall largely in the public-sector domain, additional domestic funding could mainly be possible though cost sharing by beneficiaries and the private sector. Thus, in the short to medium term, such programs do need considerable pump-priming support from external development partners particularly to finance costs of institutional strengthening, capacity building and some community-based pilot projects.<sup>44</sup>

#### B. Assistance to Kyrgyzstan from external donor agencies.

#### The World Bank

As of Fy-02, the World Bank and IDA had cumulative lending commitments of about US\$ 621 million for 28 projects. Of this, seven credits<sup>45</sup> for \$220.5 million provided balance of payments support for the government's economic reform program. On the investment and institutional development side, the World Bank has extended 19 credits with focus on four key sectors: human development; private and financial sector development; infrastructure and energy; and rural development. A number of these projects incorporate components or elements which are supportive of realizing the objectives of UNCCD. As of September, 2001, the World Bank has in its advanced pipeline three IDA projects: (i) Rural Water and Sanitation project, \$15 million (since approved); (ii) Governance Structural Adjustment project, \$35 million; and (iii) Governance Technical Assistance Credit, \$5 million- a total of \$55 million. The pace of loan disbursements has been quite satisfactory – cumulative disbursement at, \$449 million out of the total commitments of \$621 million (i.e. 72.3 %). The World Bank's Country Assistance Strategy (CAS) of November, 2001 does not include an explicit reference to environment or land degradation as a priority, though these issues are implicitly covered in areas of Bank's focus mentioned below:

- Restoring economic growth, particularly in the rural sector.
- Supporting the private sector by creating an appropriate legal and regulatory environment.
- Reducing poverty and protecting vulnerable segments of society during the transition to a market economy.
- Promoting good governance and strengthening institutional capacity.

#### The Asian Development Bank (ADB)

54. The Asian Development Bank's cumulative lending to Kyrgyz Republic at the end of 2000 amounted to 18 ADF loans for 14 projects totaling \$452.2 million. In addition, 42 TA grants have been approved, amounting to \$ 26 million. Of these, 5 loans have been closed and 16 advisory TA projects have been completed. Significant proportion of its portfolio (around 40%) comprises policy-based lending. Disbursements, as a percentage of cumulative active loans, as of end 2000 were 44.4%. Of the 14 projects, 2 were for Agriculture, 3 for social infrastructure, 2 for industry and finance, 1 for energy

<sup>&</sup>lt;sup>44</sup> The CDF projections, however, assume that the share of foreign sources in development budget would decline from 6.0% of GDP in 2001 to 3.9% of GDP in 2004.Source: Table 2 of section 6, Financial Resources – Kyrgyzstan Development Gateway. http://eng.gateway.kg/cdf\_resources.

<sup>45 (1)</sup>Rehabilitation Credit, \$60 ml; (2) Privatization and Enterprise Sector Adjustment Credit, \$15 ml; (3) Agricultural Privatization and Enterprise Development, \$15 ml; (4) Financial Sector Adjustment Credit, \$15 ml; (5) Public Sector Resource Management Adjustment Credit, \$44 ml; (6) Social Sector Adjustment Credit, \$36.5 ml; and (7) Consolidation Structural Adjustment Credit, \$35 ml.

<sup>&</sup>lt;sup>46</sup> Of the TA projects, only 3 were targeted specifically at addressing environmental concerns –

<sup># 2397,</sup> Strengthening Environmental Institutions and Improving Procedures for EIA (\$ 550,000, 1995);

<sup># 2934,</sup> Environmental Monitoring and Management Capacity Building (\$ 598,000, 1997); and

<sup># 3499</sup> Environmental Monitoring and Management Capacity Building (\$ 550,000, 2000).

sector, 3 for transport and communications sector, and 3 were multi-sector/others. <sup>47</sup> It may be noted that among its support for agricultural and rural development, ADB technical assistance has supported capacity development of water users associations. The tentative pipeline of loan projects for 2002-2004 includes 7 projects plus 3 stand-by projects. Of this 2 are in the agriculture and natural resources sector – rural development project for 2002 and second agriculture area development project for 2004. One standby project for 2004 is for environment improvement. The TA program for 2002-2004 covers projects totaling \$ 8.25 million and focus on assisting the Government in developing and implementing policy and institutional reforms in aid monitoring and coordination; and in agriculture, education, and power sectors; and for poverty reduction. A new Country Strategy and Program will be drawn up after finalization of the CDF and NPRS, prioritization in the PIP and formulation of the debt strategy.

55. The portfolios of the ADB the World Bank include a number of projects which directly or indirectly address issues which are supportive of the cross-cutting objectives of UNCCD. These are given in Table 5 below.

<sup>&</sup>lt;sup>47</sup> ADB, Kyrgyz Republic: Country Operational Strategy and Program Update (2002-2004), August, 2001, Appendix 3.

Table 5: Kyrgyzstan: Lending Operations of ADB & IDA of relevance to UNCCD

The international project under credit lines	Date of Project Loan Approval	Date of Loan Effective ness	Closing Date	Amount of Loan Approved (in 000 \$)	Cumulative Loan Amount Disbursed (in 000 \$)	Percentage of Loan Disbursed (%)	Project Executing Agency in Kyrgyzstan
ADB Assistance					( 0 0 0 4)		
Flood Emergency							Min. of
Rehab. proj. (ADB)	Sep-98	Nov-98	Dec-01	5000,0	2730	54.6%	Emergencies
Agriculture Area Development (ADB)	Dec-99	Sep-00	Jan-07	34080,0	-1	1	(MAWRPI) Min. of Agric. and Water Resources
Community-Based Infrastructure Services Sector (ADB)	June-00	Nov-00	31.12.06	35550,0	540	1.5%	MAWRPI
Rural Financing							NBKR
Institutions (ADB)	Aug-97	Apr-98	Mar-05	11,800,0	2050	17.4%	FCSDCU
Total (US\$ million)				86.43 m.	5.32 m.	6.2%	
IDA Assistance	120505	10.00.05	21.12.02	117700	7450.0	170/	) ( ) YYYD DY
Sheep Breeding	13.06.96	19.08.96	31.12.02	11550,0	5460,0	47%	MAWRPI
Development (IDA, IFAD¹)	26.10.95	16.04.96	31.12.02	3500,0	1940,0	55%	
Agricultural Support Services Project (IDA,I FAD <sup>2</sup>	22.06.98	21.09.98	31.12.03	14230,0	4540,0	32%	MAWRPI
	03.07.98	03.09.98	31.12.03	7920,0	3040,0	38%	
Irrigation Systems Rehabilitation (IDA) On farm Irrigation	22.06.98	08.08.98	31.12.04	35000,0	13024,7	37,2%	MAWRPI MAWRPI
(IDA)	29.06.00	05.12.00	30.09.07	20000,0	296,7?.	1,5%	1,1111,1,11111
Aral Sea Basin- Water Management and Environment Proj. (WB/GEF <sup>3</sup> )	21.06.98	11.02.00	31.12.02	12000,0	518,8	43,2%	MAWRPI
Flood emergency project (IDA)	28.01.99	11.03.99	30.09.03	10000,0	4756,6?.	47,6%	Min. of Emergencies
Registration of Land Users Sites (IDA)	29.06.00	14.09.00	June 2005	11835,0	1538,7	13%	State Register Agency
Rural Financing Services I,II (IDA)	03.07.97	23.07.97	30.06.01	16000,0	15955,4	99,7%	Kyrgyz Agricultural
. , ,	01.10.99	10.02.00	30.06.04	15000,0	1243,2	8,3%	Finance Corp. (KAFC)
Rural Water Supply and Sanitation (IDA)	12.02.02	25.03.02	31.10.07	15000,0	0	0	MAWRPI/ National Water Supply & Sanitation Council
Total (US\$ million)		1		172.3 m.	65.5 m.	38.0%	Council

<sup>1.</sup> Joint –financing by IFAD with IDA;
2 Joint –financing by IFAD with IDA; other cofinanciers: SDC, GTZ, KHF (British Know How Fund) through Sheep Dev. Project. <sup>3</sup> GEF project with World Bank as implementation agency.

Source: based on Country Situation Paper (CSP): table 4.2, updated. For some more details on projects, see CSP.

## **Global Environment Facility (GEF)**

- 56. The current project portfolio of GEF includes 2 enabling activity grants in Kyrgyzstan and 2 regional projects. However, none of these are related to UNCCD or land degradation, except for one of the regional project with World Bank as the implementing agency Water and Environmental Management in the Aral Sea Basin which though within the focal area of international waters, addresses the issues of land degradation. 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. As listed in Annex 5, GEF has in its portfolio the following two regional projects which also include Kyrgyzstan. These are:
  - Water & Environment in the Aral Sea Basin (ASBP), approved in May 1997, and being implemented by the World Bank, which has been discussed in Part IV. GEF financing \$ 12 million out of total costs of \$ 71.5 million.
  - Central Asia Transboundary Biodiversity Project, approved in November 1997, and being implemented by the World Bank, in Kyrgyzstan, Kazakhstan and Uzbekistan. GEF financing \$ 10.5 million out of total of \$ 14 million.

## **UNDP**

57. UNDP's major focus in Kyrgyzstan is on 'Political and Administrative Local Governance Programme', which was developed as consolidated program by clustering two on-going projects: KYR/98/H01 Decentralization and KYR/00/005 Preventive Development. The program at the local level addresses two thematic priorities of the national sustainable human development strategy of the Kyrgyz Republic: promoting effective governance and integration of society, and addresses national development problems involving political and administrative aspects of local governance in the Kyrgyz Republic. Key elements of administrative governance involve pluraltransparent aspects of policy formulation, local governance system efficiency, administrative accountability, institutional continuity, efficient service delivery. The PASD also looks at political and administrative governance from the perspective of two cross-cutting themes, Gender and Environment. Within the framework of its Natural Resources Management & Program Support Unit (PSU) framework, there are five ongoing projects: (i) conservation of biodiversity (GEF); (ii) support to the implementation of SHD; (iii) disaster mitigation and preparedness; (iv) program support project; and (v) Capacity 21 and Sustainable Development Network program (SDNP). Currently, UNDP is not involved directly in UNCCD/NAP related activities.

### **Support to UNCCD implementation from SPA partners**

58. **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". So far GTZ has pilot project in Kazakhstan, Turkmenistan and Uzbekistan. GTZ has been involved in the Coordination Board under the Prime Minister on development of tourism in Kyrgyzstan. Three experts from Kyrgyzstan took part in the GTZ/ZEL training course in Tashkent-Samarkand in 2001 on developing of pilot projects in ecotourism. The Ministry of Ecology and Emergency Situation of Kyrgyz Republic jointly with the GTZ implement the Basic Directions of

 $<sup>^{\</sup>rm 48}$  From UNDP in Kyrgyzstan web site, and UNDP Kyrgyz publication: Investing in People.

Ecologically Oriented Planning of Socio-economic Development of Issyk-Kul Oblast Project – Biosphere Reserve.

- 59. **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 in the process of being identified in CARs. As part of this process, a GM/CIDA mission led by a Senior Environmental Consultant<sup>49</sup> visited Bishkek in September, 2002, to work with the Kyrgyz Irrigation Research Institute, to develop a proposal for a pilot project that will test one or more community-based approaches. The project will address the programming priorities of the two prospective lead funding agencies the Global Mechanism and the Canadian International Development Agency. In addition, it will create linkages with other donors in the region (e.g. ADB, GTZ) and with other similar initiatives.
- 60. **Switzerland** is anticipated to join SPA. The Swiss Agency for Development Cooperation (SDC) has funded a project "Integrated Water Management in the Fergana Valley", which addresses issues of direct relevance to controlling land degradation. SDC also finances the Dom Gor program on mountain development actions, the Central Asian Mountain Partnership Program (CAMP), and the Development of community-based tourism project (Helvetas).
- 61. **IFAD**, also anticipated to join SPA, has financed two projects, both co-financed with IDA the sheep development project and the agricultural support services project (see table 4). GM and IFAD are discussing possibilities of future collaboration in Kyrgyzstan and other CA member countries.
- 62. **ICARDA** is also expected to join SPA. It is supporting a number of agricultural research activities in the CARs. For instance, ICARDA has helped develop promising varieties of winter wheat. In Kyrgyzstan, it has seeds of Jamin variety available for distribution among farmers. It is also collaborating with CARs, including Kyrgyz Republic, on efficient on-farm soil and water management technologies for sustainable agricultural production systems, for which ADB has been approached for support for a phase II (2003-2005) project.
- There are other donor activities in Kyrgyzstan, which are supportive of UNCCD implementation. This information, based on GM's FIELD system data is summarized in table 6 below:

Table 6. Other Donors' Projects Supportive of UNCCD

	Tubic of Guiler 2 onors 11 of cos support to 01 of the cal	
Germany	Tengir Too Biosphere Reserve (1995)	
Switzerland	Kyrgyz-Swiss Agricultural Project (1997-2004)	8,907,933
USA	Surface irrigation as affected by polymer amendments and soil properties	
EU	The role of wetlands in retention of water and nutrients in the landscape, i.e. in preventing aridisation of the landscape, and in final treatment of wastewater (1999-2004)	
Source: GM-F	IELD Data Base	

.

<sup>&</sup>lt;sup>49</sup> Mr. Leo Bouckhout, Vice President, E2 Environmental Alliance Inc.

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

- 64. In the context of UNCCD/NAP, the Focal Institution and the National Coordinator/NFP-UNCCD are keen to explore possibilities for having regional programs, or cooperation activities particularly in three areas: (i) regional market information system for agricultural producers; (ii) (ii) pasture management and conservation; (iii) sharing of experiences and best practices based on pilot projects addressing land degradation issues of shared concern. Kyrgyzstan is also involved in the two GEF regional projects. At a broader level, the Kyrgyz Republic supports ADB's initiatives/programs, such as the Almaty-Bishkek roads project, σ cooperation on removing trade restrictions and barriers between CARs. *Perhaps, Kyrgyzstan may be relatively keener among the CARs on promotion of regional dialogue on its concerns relating to water-sharing arrangements, by IFIs, such as ADB*.
- 65. 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, TACIS and GM 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 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 ISDC umbrella. 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.
- 66. To summarize the preceding review in parts V and VI, table 7 below provides a matrix of participants in CDF by main sectors.

Table 7: Matrix of Partners' participation in Kyrgyz CDF

Development	Development priorities	State	Private	NGO	Donors,	
Objectives	Development priorities	State	sector	sector	international	
Objectives			Sector	Sector	organizations	
Efficient &	State governance reforms	XXX	X	XX	XX	
transparent state	Democratic institutions	XXX	XXX	XXX	XX	
governance	Domocratic institutions	12222	12222		122	
Fair, protecting &	Poverty Reduction	XXX	XXX	XX	XXX	
human development	Human development	XXX	XXX	XXX	XXX	
	Private Sector	XXX	XXX	XX	XXX	
	Development					
Sustainable	Strengthening financial	XXX	XX	X	XXX	
economic	system					
growth &	Foreign debt management	XXX	X	X	XX	
development	Promoting private direct	XX	XXX	X	X	
	foreign investments	3/3/	******	<b>X</b> 7	W.	
	Foreign trade development	XX	XXX	X	X	
	Development of transport & informational	XXX	XX	X	, AA	
	infrastructure					
Development of	Development of villages,	XXX	XXX	XX	XX	
cities & villages	remote areas & mountain		AAA	2424	78/4	
	territories					
	Development of small	XXX	XXX	XX	X	
	cities					
	Reducing damage from	XXX	X	X	XX	
Safe	natural disasters					
development	Environmental protection	XXX	XX	XX	XX	
	Safety of State and people	XXX	X	X	X	
XXX	Heavy involvement					
XX	Some involvement					
X	Little involvement Priority areas of special relev	vamaa ta LINCCI	Dualated someone			
			D related concern	18	1	
Source: Ky World Bank's	rgyzstan Development Gatewa					
partners by main	(a) The <b>EBRD has</b> ongoin		_			
areas of	(ii and finance; and (iii)	) transactions in	mining, power,	telecommunica	tions and	
involvement.	agribusiness sectors.					
	(b) The <b>ADB</b> has ongoing	and potential ne	w programs/activ	vities including	: (i) education; (ii)	
Source:	expenditure manageme	•		_		
World Bank CAS	issues; (iii) and finance			_	_	
Progress Report,	development; (vii) serv			judiciary syster	ii, (vi) iuiai	
November 2001.	_	-		1-4- 4 4 (1)	-1.11.4	
* author's insert	(c) The United Nations is	•				
* author's insert.	(ii protection; (iii) migr		-		_	
	and evaluation key prog		g the NSPR, mac	roeconomic po	licies, etc.). <b>GM</b>	
	in UNCCD implementa	ation.*				
	(d) Bilateral donors are su	upporting effort	s in numerous are	eas, including,	accounting and a	
	(USAID), small- and m	edium-enterpri	se development,	investment and	trade (USAIID),	
	food security, (EU), he	alth and sanitat	ion (WHO, DFIE	), USAID), pov	ver sector reform	
	food security, (EU), health and sanitation (WHO, DFID, USAID), power sector reform (DFID), macroeconomic framework (EU, DFID), airport, roads and infrastructure					
	(Japan), civil society de					
	USAID).	opinent (Ob	, 5 w 155), agi	.icanuarai icioii	110 (D W 100,	
	· ·	IME 4L APP	and the EDDD	in available of	a ontiona!	
	(e) <b>IDA</b> , together with <b>the</b>					
	addressing external debt, poverty and development issues in the five low-income CIS					
	· ·		•			
	countries (Armenia, Ge	eorgia, Kyrgyz I	•			

## VI. Issues & Opportunities in implementing UNCCD in Kyrgyz Republic

## A. Obligations to support UNCCD implementation under the Convention

67. 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 the Kyrgyz Republic. 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 3 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: It is observed that implementation of the NAP activities is stalled due to the dual constraints of limited capacity and budgetary funds. Even though the Kyrgyz Republic is pursuing a policy of fiscal discipline, the situation needs to be reviewed at senior levels by the Government to consider making appropriate financing from domestic resources available for the priority programs to combat desertification. As for the development partners, their support to the Republic is being provided within the framework of CDF/NPRS. Even so, there is a strong rationale for the multilateral and bilateral donors to consider appropriate adjustments in their program priorities so that some grant resources can be earmarked to pump prime some of the activities which are directly or indirectly supportive of UNCCD objectives through a conscious support to UNCCD through the NAP framework. This might provide a good entry point to contribute to the objectives of sustainable management of ecology and environment, and poverty reduction.

Box 3: 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 sub regional 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

68. The Kyrgyz Republic is rich in water resources, is endowed with limited but potentially productive arable land and plentiful of forests and grasslands. However, its productivity is severely constrained by serious land degradation caused by wind and water erosion, drainage and salinity problems, pollution caused by industrial discharge, deforestation and poor maintenance of rangelands. Out of 10.5 million ha of arable lands, 5.4 million ha (51%) are affected by erosion. In addition, 1 million ha of forest land are eroded. Steep slopes, the absence of vegetative cover, and excessive stocking rates all contribute to the erosion problem. Their underlying causes and nature of corrective actions need to be carefully worked out with full involvement of local populations, rather than being imposed from the top. Such solutions also must build on local knowledge and experience and contribute to improvement in the living conditions and livelihoods of the local communities.

Conclusion no. 2: "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. 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 community-based action research with value-added for technology up-gradation, on-ground solutions, or efficient resource conservation. The priority areas and pilot projects requiring TA support should be identified with particular focus on:

- Study of causes underlying the decline of productivity of agricultural lands in Kyrgyzstan –technical, institutional and policy.
- Research on prevention of water loss techniques in up-stream water storage and distribution networks, and cost-effective approaches to containing water erosion and salinization problems.
- Participatory approaches to pasture and rangeland management.

## C. Institutional factors constraining implementation of NAP

- 69. The factors constraining the implementation of NAP were discussed in detail in Section C. of Part III and a number of suggestions to strengthen the NAP and its instruments were discussed. It was emphasized that three-pronged approach, comprising mainstreaming, participation and operational orientation, was needed to revitalize the implementation of the UNCCD. There are four basic institutional constraints to the implementation of NAP:
  - (a) NAP in Kyrgyzstan is a "stand alone" document, available only in Russian, which lacks the status of a formally recognized development program within the framework of the government's planning and budgetary processes. It does not have a distinct budget subhead to facilitate allocation of budgetary resources on a systemic basis. Its policy and program content should be strengthened and clearly articulated in a rolling action plan to implement the NAP.
  - (b) The National Center on the UNCCD implementation (NCCD) is an informal arrangement, which should be formalized, and better equipped and given funding support and flexibility to hire experts to help the NFP in his interactions with the international community, and to better service the National Coordinating Body (NCB) of the Convention.
  - (c) The staff of the Focal Institution and from other concerned agencies involved with UNCCD implementation needs training and capacity building support in program development and approaches to improve interface with development partners to access external resources.
  - (d) The development partners need to give a stronger and more direct priority to addressing land degradation issues as part of their support to poverty reduction objectives.

70. Four other areas are important in the context of strengthening the NAP process: (i) synergistic collaboration with other environmental conventions and action plans; (ii) use information technology as an instrument to promote active participation of the rural communities in the program activities to combat desertification; (iii) participatory mechanisms involving local communities in the management of common property natural resources, or maintenance of desertification control assets - through appropriate legislative measures such as the recent law on Water Users Associations; and (iv) closer relationship between NGOs and local government administration at the level of oblasts (provinces), rayons (districts), and with elected village councils and settlements, so as to generate more home-spun community based initiatives to combat land degradation.

**Conclusion no. 3:** The corrective actions to overcome the institutional constraints to the implementation of NAP/CD primarily rest with the Government of the Kyrgyz Republic. However, the interested development partners may consider pump-priming these actions through policy dialogue, coupled with some funding support to strengthen the capacity of the NFP and of the Focal Institution:

(i) In the short-term, funds are needed for strengthening the office of the NFP to mainstream his activities into the government decision-making processes. For instance, the status of the NCB needs to be formalized so that it can submit its recommendations/ issues relating to NAP/CCD implementation to the regular economic sessions of the Government intended for the solving of multidisciplinary problems. The NFP requires urgent bridging grant funds (from interested development partners) for engaging experts, as short-term

consultants, even for the preparation of materials to the NCB and economic sessions of the Government.

- Over time, however, concerted actions are needed to promote synergies between the (ii) NAP-CD and other Rio Conventions and NEAP. Here again, the engine to drive this process is missing. Strengthening the policy and programmatic content of the Action Plans to implement these Conventions, including that of the CCD-NAP, would catalyze collaborative activities around concrete action areas. Such collaboration must be conceived within the CDF/NPRS framework. Mere emphasis on establishing formal administrative mechanism, important as they are, would not be a sufficient condition to promote synergies. Mainstreaming is a key issue for all the conventions and could be a basis in determining areas of synergy for mutual collaboration. Priorities for mainstreaming should be based on: (a) potential returns due to the physical magnitude of the problems; (b) institutional feasibility considerations; and (c) estimates (even back of the envelop estimates) of relative economic costs and 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.
- (iii) NAP implementation should promote more direct involvement of civil society and NGOs, working in close concert with decentralized administrative bodies at sub-national levels and particularly with the elected village councils to promote community-based participatory approaches to combat desertification. The efforts of the NFP to establish and use information technology for extending the outreach of the NAP activities to the grassroots may be supported by development partners.

## D. The policy and legislation related constraints

- 71. Kyrgyzstan has made advances in economic reforms, democratic governance, civil society participation and small-enterprise development, led by agriculture. While the country has done well in attracting international aid, its high external debt burden continues to hamper resource management and poverty reduction efforts. Lack of market access and institutional weaknesses, as well as the need for further second generation reforms pose tremendous challenges as well as opportunities for the Government. The Kyrgyz NPRS includes among its agricultural policy targets to carry out a series of measures to reduce degraded lands by 5 percent each year. This underscores the need for the NFP/CD to establish close contacts with the PRSP focal institutions to agree upon concrete activities/projects to meet this target, including allocation of some budgetary resources for this purpose. In this context, Box 1 (in Part IV) highlights the matrix of measures for the national poverty reduction strategy which may be particularly supportive of realizing UNCCD objectives.
- 72. The Kyrgyz Republic shares the main limitations of the legislation in the CARs: serious inconsistencies in legislation, weak administrative capacity to implement the law and considerable scope for bureaucratic discretion in application of laws and regulations. The legislative changes are an evolving process and emphasis needs to be placed on strengthening the compliance and enforcement of the existing legislation, as on promulgating new laws. 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 objective of the

.

<sup>&</sup>lt;sup>50</sup> UNDP Strategy for Central Asia - 2003-2005. UNDP, Regional Bureau for Europe and the CIS, January 2003.

legislative reforms is to stabilize and create a favorable legal and institutional environment; raise the effectiveness of law making; streamline existing laws; and in general improve the legislative framework.

73. **Issues of water sharing with other CARs.** The plan for the division of exploitable water reserves among republics was made during Soviet times. Supplies of oil, gas and other power sources were shared. After independence, neighboring countries of the Kyrgyz Republic have exploited their supplies of gas and oil to their advantage. However, the Kyrgyz Republic had to abide by the existing water agreements with other countries. In this context, there are periodic discussions between the CARs at the highest levels of Government, but many policy issues remain to be resolved in an area which is politically quite sensitive

### Conclusion no. 4:

- (i) The best entry points to establish a closer interface between the UNCCD/NAP and the national development policy framework would be to focus on measures which address land degradation problems in the context of improving agricultural productivity and promoting efficient water use. This should be relatively easy since the responsibility for UNCCD implementation lies with the Ministry of Agriculture, Water Resources and Processing Industry (MAWRPI). However, it needs to be realized that land degradation is part of a broad environmental agenda and national action plans of the other environmental conventions. The most pragmatic approach would be for UNCCD-NFP to collaborate together with the Focal Points of other environmental National Action Plans and aim for a harmonized approach to link up with the CDF/NPRS frameworks. This would pave the way for evolving a coherent and synergistic policy framework sensitive to land degradation and other environmental concerns.
- (ii) From the perspective of the Kyrgyz Republic, there are certain important issues of water sharing with other cars, which require regional and bilateral cooperation at the policy levels. A good illustration of bilateral cooperation is the 1998 Syr Darya Agreement between the Kyrgyz Republic and Kazakhstan, which provides for sharing O& M costs between the two countries.

## E. Constraints to effective program development and implementation

- 74. This section looks at two main issue areas relating to overcoming the constraints affecting program development and implementation of the UNCCD: (i) how to overcome the constraints to the mainstreaming of NAP as the main instrument to implement the Convention; and (ii) how to find financing for such programs and improve the involvement of donor community in the implementation of the UNCCD.
- 75. **The issues of mainstreaming** the NAP have been discussed in Section C. The two key points for action from the standpoint of program development are:
  - (i) At the national level, to work within the CDF/NPRS framework on programs which are cross-cutting in nature. Conceptualization and development of such priority programs requires working closely with other Government ministries and agencies concerned with agriculture, water, forests and environment, preferably piggy-backing on their programs to incorporate land degradation concerns within those programs.

- (ii) At the local levels, to aim for local area development projects (LADPs), giving preference to community based and participatory pilot projects to be implemented through decentralized local self government bodies and community organizations. Many of the priority areas of research discussed in Part V also can be best implemented as pilots with direct involvement of research agencies but with emphasis on their relevance for down stream application in local contexts.
- 76. **The issues of financing**. In one sense, Kyrgyzstan has perhaps the best record on policy reforms in the Central Asia region, which should make it a good candidate for external funding support. But this advantage is offset by the enormous debt burden it accumulated in the 1990s, partly because of rush of borrowing from both commercial and multilateral development institutions. The CCD Focal Institution has to contend with a number of constraints in finding resources to finance the NAP related priority projects:
  - (a) The management of the Kyrgyz debt burden has resulted in increased fiscal discipline. The **Public Expenditure Management reforms** in the Republic focus on reducing the size of the public investment program (PIP). Thus, the CCD Focal Institution will need to prepare a strong rationale for inclusion of its priority projects to combat desertification into the state PIP for funding. Such rationale must be based on demonstrating how such NAP-related programs would have a positive impact on poverty reduction and employment generation. <sup>52</sup>
  - (b) The CCD Focal Institution, the NFP, and the other concerned government agencies have sever capacity limitations in areas of program development and implementation, which calls for considerable technical assistance support from interested development partners.
  - (c) As for meeting the financing needs for program implementation, the first charge must be on domestic resources. Given the tight budgetary situation, the CCD/NAP priority programs have to compete with a host of other urgent national spending priorities. Therefore, there is need to explore other avenues of domestic financing, coupled with efforts to ensure cost efficient design of project proposals. One such avenue would be to build partnerships with the private sector, both at the corporate and the farm and village levels to share the financial burden of some of its priority projects. Such projects should place emphasis on expected benefits in the form of increased productivity, income or employment as the outcomes of such projects.
  - (d) It is however inevitable that in the current tight fiscal situation, the Government would be constrained to look to external donor agencies and international multilateral organizations for support in the implementation of its CCD/Nap related priority programs. Any such approach, however, has much greater chance of success if it is nested in the Kyrgyz CDF/NPRS framework.
  - (e) The development partners may need to favorably consider such requests, given the importance of combating land degradation from the perspective of the goals of poverty

33

\_

<sup>51</sup> IMF, Thomas Helbling, Ashoka Mody and Ratna Sahay, "Debt Accumulation in the CIS Countries: Bad Luck, Bad Policies, or Bad Advice? The paper was prepared for the Lucerne Conference of the CIS-7 Initiative, January 20-22, 2003.

<sup>&</sup>lt;sup>52</sup> The PRSP aims to keep track of distributional aspects of growth, and favors specific policies and programs designed to integrate the poor and disadvantaged into the growth process.

reduction and sustainable natural resource management. It may be possible for development partners to find such resources partly by internal reordering of priorities and partly by incremental resource inflows to the extent feasible in the context of each donor agency's own operations and programming cycles and outcomes of bilateral contacts between the CCD Focal Institution/NFP and the donor agencies.

**Conclusion no. 5:** The tight budgetary situation implies that extent of public funding to finance the priority projects/and programs to implement CCD/NAP seems to be very limited except through internal switching of budgetary allocations, combined with cost efficient use of such allocations. Though programs to combat desertification/ land degradation fall largely in the public-sector domain, the possibilities for cost sharing by the private sector and the beneficiaries would need to be explored. Finally, in the short to medium term, such programs do need considerable pump-priming support from external development partners particularly to finance costs of institutional strengthening, capacity building and some community-based pilot projects. Such support however should be mobilized to the maximum extent possible within the framework of CDF/NPRS.

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

A new window of opportunity has opened with the amendment to the GEF Instrument "to 77. 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 the context of land degradation see box 4 for more detailed criteria.

Kyrgyzstan should be in a position 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 5. Other innovative financing possibilities could also be explored:

- Regional Programs relating to agreed priority areas for regional cooperation in combating transboundary dimensions of desertification. In this context, an umbrella regional program, with each Central Asian Country being responsible for implementation of national components, could be explored as one possibility. A possible model could be the GEF umbrella program for Western China, for which ADB is the executing agency.<sup>5</sup>
- Under Kyoto Protocol there may be possibilities for trading in carbon sequestration transactions, since Kyrgyzstan has large potential for forest plantation programs, which serve the dual purpose of serving as carbon sinks and preventing land degradation. 54

<sup>53</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>54</sup> At the present moment, three project-based programmes for greenhouse gas reduction are operational: the Prototype Carbon Fund established by the World Bank and the ERUPT and CERUPT programmes developed by the Dutch Government. Recently, Finland also launched a programme to purchase certified emission reductions from small-scale Clean Development Mechanism projects, but no proposals are known from this tender yet. See, "An Overview of Carbon Transactions: General Characteristics and Specific Peculiarities", by H.C. de Coninck, N.H. van der Linden, March 2003, ECN-C--03-022.

• There may be possibilities for collaboration between CCD/NAP and the follow up activities under the National or Regional Strategy and Action Plan for Sustainable Mountain Area Development.

**Conclusion no. 6:** Given the positive performance of the Kyrgyz Republic in policy reforms, the availability of the Governments CDF/NPRS development framework, and the involvement of a large number of development partners in many areas of Kyrgyz economic growth efforts (see Section G), it should be possible for the Government to work on some creative and "out-of-the-box" ways of mobilizing resources targeted at combating land degradation. These efforts could be helped by some preparatory technical assistance from interested development partners under the aegis of SPA framework.

# Box 4: The Elements of a GEF Operational Program for the Prevention and Control of Desertification and Deforestation through Sustainable Land Management $^{55}$

The main strategic considerations and operational principles that would guide the development of GEF-eligible activities could be summarized as:

- (a) Integrating conservation and sustainable use of land resources as a priority into overall strategic frameworks such as local, national, and sub-regional sustainable development plans, policies, and programs.
- (b) Helping people, particularly local communities, to protect and sustain ably manage non-protected and inhabited dryland, forest, and mountain ecosystems, particularly in agricultural landscapes, through targeted and cost-effective interventions at local level
- (c) Integrating sustainable land management interventions to achieve global environment GEF focal areas biodiversity conservation, climate change, and international waters.
- (d) Building institutional capacity, from the community level to the national level where appropriate, to effectively address land degradation.
- (e) Developing a portfolio that encompasses representative non-protected ecosystems and people affected by land degradation.
- (f) Targeting and designing GEF activities which complement recipient countries agreed sustainable land management objectives, particularly at the community level, in strategic and cost-effective ways.
- (g). Early intervention in areas vulnerable to land degradation and rehabilitation of degraded areas.
- <sup>1</sup> See documentation for the 20<sup>th</sup> Session of the GEF Council.

G. Forging strategic partnership among donors and do mestic stakeholders

79. The Kyrgyz Republic Comprehensive Development Framework (CDF) to 2010 provides an "Involvement Matrix (see Annex 4). It indicates areas on which donor community would focus. The matrix does not have a specific box for Rio Conventions, but only a box for Environmental Protection. One of the problems with confining UNCCD to this box is that the Convention is multi-sectoral and its elements are covered in a variety of boxes in the Matrix – i.e. poverty reduction, strengthening incentive system, developing villages, remote areas and mountainous territories, and state governance reforms (see table 7). The involvement matrix, however, is a useful framework to map out potential involvement of different partners. 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.

Kyrgyzstan: IACD ECONOMIC INDICATORS

Item	1995	1996	1997	1998	1999	2000
A. Income and Growth						
GNP per capita (\$, current) a     GDP Growth (%, constant prices)     Agriculture and Forestry     Industry and Construction     Services	500.0 (5.4) (2.0) (12.3) (4.4)	550,0 7.1 15.2 2.6 (0.2)	480.0 10.1 12.3 19.8 0.6	380.0 2.1 2.9 (6.6) 4.5	257.6 3.6 8.2 (3.7) 3.4	5.0 3.9 6.0 5.0
B. Savings and Investment			(percent o	of GDP)		
<ol> <li>Gross Domestic Savings</li> <li>Gross Domestic Investment</li> </ol>	5.5 18.3	(0.6) 25.2	13.8 21.7	(6.1) 15.4	3.2 18.0	_
C. Money and Inflation		(a	annual perce	ent change)		
<ol> <li>Consumer Prices (annual average)</li> <li>Consumer Prices (end of period)</li> <li>Broad Money (M2)</li> </ol>	43.5 31.9 77.8	31.9 35.0 22.9	25.4 14.7 25.4	17.2 18.3 17.2	35.9 39.9 33.9	18.7 9.6 12.4
D. Government Finance*		(percent of GDP)				
<ol> <li>Revenue (including grants)</li> <li>Total Expenditure</li> <li>Accrual Surplus (+) / Deficit (-) b</li> <li>Overall (cash) Surplus (+) / Deficit (-)</li> </ol>	16.7 33.2 (16.4)	16.0 25.2 (9.4) (9-2)	16.2 25.3 (8.9) (9.1)	18.0 28.8 (9.9) (10.8)	17.8 30.6 (12.7) (11.9)	15.9 26.1 (10.2) (9.7)
E. Balance of Payments						
Trade Balance (% of GDP)     Current Account Balance (% of GDP)"     Export (\$) growth (annual percent change)	(8.2) -(15.7) 20.3	(13.8) (24.6) 29.8	(0.9) (7.9) 18.8	(13.5) (22.3) (15.2)	(6.8) (14.9) (13.6)	0.7 (6.8) 10.4
4. Import (\$) growth (annual percent change)	24.6	33.7	(17.5)	17.0	(27.6)	(8.2)
F. External Payments Indicators 1. Gross Official Reserves (S million, end-period) (months of Imports)'	2.0	110.0 1.5	142.0 3.0	130.0 2.5	184.0 4.3	205.5 4.5
<ol> <li>External Debt Service (% of exports)<sup>d</sup></li> <li>Total External Debt (% of GDP)'</li> <li>Public External Debt (% of GDP)"</li> </ol>	17.8 51.1 33.8	8.5 63.2 35.2	5.7 76.3 44.2	7.0 90.2 56.0	8.3 133.1 90.6	11.2 132.0 94.8

<sup>- =</sup> Not available, GNP = gross national product, GDP = gross domestic product.

Sources: National Statistical Committee, National Bank of the Kyrgyz Republic, World Bank, and International Monetary Fund.

Source: ADB: Kyrgyz Republic Country Strategy and Program Update (2002-2004) - Appendix1 & 2.

a World Bank estimates, using Atlas methodology based on a three-year average of inflation-adjusted exchange rates. The estimate is heavily biased by the use of the official ruble-dollar exchange rate in pre-independence years.

pre-independence years.

b The fiscal accounts now include the foreign financed public investment program (PIP); and privatization revenues were reclassified from capital revenue to domestic financing. As a result, the measured deficits differ from previous reports.

<sup>&</sup>lt;sup>c</sup> IMF estimates, excludes the Central Bank's pledges to secure government guaranteed loans and blocked deposits

<sup>&</sup>lt;sup>d</sup> Pertains to public and publicly guaranteed debt scheduled payments.

<sup>\*</sup> Preliminary estimates for 2000.

# SOCIAL AND ENVIRONMENTAL INDICATORS Table A2.1: Population and Social Indicators

Rural Population (percent) Annual Population Growth Rate (% change over the  previous year) Social Indicators  Total Fertility Rate (births per woman)  Maternal Mortality Rate (per 100,000 live births) Infant Mortality Rate (below 1 year; per ,000 live births) Life Expectancy at Birth (years) Female Male  Adult Literacy (%) Primary School Enrollment (% of school age population) Female Secondary School Enrollment (% of school age	.0	4.3	1992		
Total Population (millions)  Rural Population (percent) Annual Population Growth Rate (% change over the  previous year) Social Indicators  Total Fertility Rate (births per woman) Maternal Mortality Rate (per 100,000 live births) Infant Mortality Rate (below 1 year; per ,000 live births) Life Expectancy at Birth (years) Female Male  Adult Literacy (%) Primary School Enrollment (% of school age population) Female Secondary School Enrollment (% of school age		4.3	1002		
Rural Population (percent) Annual Population Growth Rate (% change over the  previous year) Social Indicators  Total Fertility Rate (births per woman)  Maternal Mortality Rate (per 100,000 live births) Infant Mortality Rate (below 1 year; per ,000 live births) Life Expectancy at Birth (years) Female Male  Adult Literacy (%) Primary School Enrollment (% of school age population) Female Secondary School Enrollment (% of school age		4.3	1002		(1000)
Annual Population Growth Rate (% change over the  previous year) Social Indicators  Total Fertility Rate (births per woman)  Maternal Mortality Rate (per 100,000 live births) Infant Mortality Rate (below 1 year; per ,000 live births) Life Expectancy at Birth (years) Female Male  Adult Literacy (%) Primary School Enrollment (% of school age population) Female 11 Secondary School Enrollment (% of school age	_		1774	4.9	(1999)
previous year) Social Indicators 3 Total Fertility Rate (births per woman) 42 Maternal Mortality Rate (per 100,000 live births) Infant Mortality Rate (below 1 year; per ,000 live births) Life Expectancy at Birth (years) Female Male  Adult Literacy (%) Primary School Enrollment (% of school age population) Female 11 Secondary School Enrollment (% of school age		61.9	(1993)	65.0	(1999)
Social Indicators  Total Fertility Rate (births per woman)  Maternal Mortality Rate (per 100,000 live births)  Infant Mortality Rate (below 1 year; per ,000 live births)  Life Expectancy at Birth (years)  Female  Male  Adult Literacy (%)  Primary School Enrollment (% of school age population)  Female  Secondary School Enrollment (% of school age	.4	1.9		1.3	(1999)
Social Indicators  Total Fertility Rate (births per woman)  Maternal Mortality Rate (per 100,000 live births)  Infant Mortality Rate (below 1 year; per ,000 live births)  Life Expectancy at Birth (years)  Female  Male  Adult Literacy (%)  Primary School Enrollment (% of school age population)  Female  Secondary School Enrollment (% of school age					
Maternal Mortality Rate (per 100,000 live births)  Infant Mortality Rate (below 1 year; per ,000 live births)  Life Expectancy at Birth (years)  Female Male  Adult Literacy (%)  Primary School Enrollment (% of school age population)  Female Secondary School Enrollment (% of school age	.9	3.7	(1992)	2.6	(1999)
Infant Mortality Rate (below 1 year; per ,000 live births) 69 Life Expectancy at Birth (years) 69 Female 90 Male  Adult Literacy (%) 12 Primary School Enrollment (% of school age population) 12 Female 11 Secondary School Enrollment (% of school age	2.8	44.0	(1993)	42.0	(1999)
births) 66 Life Expectancy at Birth (years) 66 Female 90 Male  Adult Literacy(%) 12 Primary School Enrollment(% of school age population) 12 Female 11 Secondary School Enrollment (% of school age	7.8	31.3	(1993)	22.7	(1999)
Life Expectancy at Birth (years) Female Male  Adult Literacy (%) Primary School Enrollment (% of school age population) Female Secondary School Enrollment (% of school age	3.5	68.0	(1993)	67.0	(1999)
Female 90 Male  Adult Literacy(%) 12  Primary School Enrollment(% of school age population) 12  Female 11  Secondary School Enrollment (% of school age 11)	9.8	72.7	(1993)	71.1	(1999)
Male  Adult Literacy(%) 12  Primary School Enrollment(% of school age population) 12  Female 11  Secondary School Enrollment (% of school age	5.6	64.6	(1993)	62.9	(1999)
Adult Literacy (%) 12 Primary School Enrollment (% of school age population) 12 Female 11 Secondary School Enrollment (% of school age	).5	95.2	(1991)	98.7	(1999)
Primary School Enrollment (% of school age pop ulation) 12 Female 11 Secondary School Enrollment (% of school age				110.0	(1994)
Primary School Enrollment (% of school age population) 12 Female 11 Secondary School Enrollment (% of school age	3.0	112.0		111.0	(1994)
Female 11 Secondary School Enrollment (% of school age					( )
Secondary School Enrollment (% of school age	3.0	112.0		94.0	(1999)
	0.0	101.0	•	99.0	(1999)
	8.0	102.0	(1000)		
Female		7.0	(1993)	9.3	(1996)
Child Malnutrition (% of under age 5)	_	43.5	(1996)	52.0	(2000)
Percent of Households Below the Poverty Line		5.7	(1993)	10.3	(1999)
Income Ratio of Highest 20% to Lowest 20%				77.0	(1999)
Population with Access to Safe Water (%)	_	_		53.0	(1993)
Population with Access to Sante Water (%)				4.1	(1999)
				•••	()
Public Education Expenditure as % of GDP	_	8.2		2.6	(1999)
Public Health Expenditure as % of GDP		- 3.9		0.706	(1999)
Human Development Index		0.689	n	0.706	(1999)
Human Development Ranking		83		97	(1997)

- = not available, GDP = gross domestic product.
Source; National Statistical Committee, World Bank.

**Table A2.2: Environmental Indicators** 

Item	1990	L	atest Year
Forestry			
Total Forest Area	730	730	1995
Annual Deforestation	-	-	
Biodiversity			
National Protected Area			
Area (thousand hectares)	-	688	1997
Number			
As % of Land Area	-	31	1997
Biosphere Reserves			
Area (thousand hectares)	-	71	1997
Number	-	1	1997
World Heritage Sites (number)			
Area (thousand hectares)	-	-	
Number	-	-	
Wetlands of International Importance			
Area (thousand hectares)	-	630	1997
Number	-	1	1997
Land Use (thousand hectares)			
Cropland	-	1399	1999
Permanent Pasture	-	199	1999
Global Environmental Problems			
Total C02 Emissions (thousand metric tons)	-	5.463	1995
Per Capita CO; Emissions (metric tons)	-	1.2	1995

-= not available, CO; = carbon dioxide.
Source; National Statistical Committee, World Bank, United Nations Development Programme.
Updated in May 2001 (UNDP HDR 2000).
Source: Kyrgyz Republic: Country Strategy & Program Update (2002-2004), Appendix 2, p.2.

Kyrgyzstan-IACD

Table A. Kyrgyzstan: State of Surveyed Agricultural Land (thous. hectares)

	Agricult	ural land	Arable	Land	Incl. irri	gated land
Characteristics	1985	1990	1985	1990	1985	1990
<b>Total land surveyed</b> Salinized	8142.3	9981.1	1273.3	1297.3	839.8	838.3
Of that, heavily salinized	666.3	1170.3	218.9	191.4	160.8	109.1
and salt-marshes	184.1	372.1	45.7	35.7	34.4	20.6
With alkali complexes	243.4	469.3	99.5	80.1	79.6	44
Of that, more than 50% of alkali	43.5	200.5	11,9	11.6	9.6	7.1
Swampland	28.9	89.2	11.9	4.1	2.8	1.4
Of that, mode rately	28.9	28.1	2.8	0.9	2.8	0.5
heavily Stony	2397.4	44.4 3808.4	2.8 245.9	$\begin{array}{c} \textbf{0.7} \\ \textbf{250.0} \end{array}$	- 159,8	161.3
Of that, moderately	37.4	1400.4	79.2	71.9	51.7	44.0
strongly and very strongly	334.1	805.4	22.4	22,4	14.3	13.8
Exposed to wind erosion	616.2	5475.3	505.5	889.7	98.6	572.2
Of that: moderately	96.5	386.6	54.3	19.9	10.4	323.3
strongly	37.9	549.7	1,0	6.7	0.6	5.9
Exposed to water erosion	725.7	4544.8	659.5	770.2	368.1	492.1
Of that; moderately	144.8	1880.4	109.6	300.7	67.8	185.2
strongly	28.1	849.0	17.8	75.1	10.2	44.6
Slope profile:						
Up to 2 - erosion-exposed		1792.6		988.0		719.8
2-5 - slightly eroded		1569.9		242.4		113.5
5-10 - moderately eroded		2Q52.7		33.6		4.5
<b>above 10 - severely eroded</b> Soil mechanics:		4565.9		3.3		0,5.
Clay Loamy		110.0 9026.4		42.8 122.9		2 795.6''
Sandy loam		720.2		30.3		15.5
Sandy		124.5		1.3		0.9
* In complex						

Source: Ministry of Ecology and Emergencies (Taken from: UN-CCA, Table 7.3.8, p.125)

Table B. Kyrgyzstan: Income from irrigated and drylands

	Tuble B. Hyigyzbum. meeme nom ninguted und di yumas					
Oblasts	Income					
	Irrigated lands	Dry lands				
Batken	2810,7	1217,1				
Jalal-Abad	3043,3	659,6				
Issyk-Kul	2806,6	643,2				
Naryn	978,5	316,5				
Osh	3902,6	1039,6				
Talas	2517,6	709,9				
Chui	3100,3	841,6				

 $Source: Kyrgyzstan: Country\ Situation\ Paper,\ table\ 6.1,\ p.46$ 

## Kyrgyzstan-IACD

## List of Draft Laws to be Adopted under Kyrgyz Republic's CDF

Draft law	for drafting work
On Public Social Privileges in the Kyrgyz Republic	Q III-IV, 2001
On Physical Training and Sports	Q III, 2001
On Status of Judges in Kyrgyz Republic	Q IV, 2001
On Executory Process and Status of Officer of Justice	Q III, 2001
On Protection of Deposits	Q I, 2002
On Volunteership	Q II, 2002
On Social Partnership	Q IV, 2001
On Information Resources	Q III, 2001
On Insurance of Information Risks	Q I, 2001
0 On Insurance of Industrial Accidents and Occupational Diseases	Q IV, 2001
1 On Defense	Q IV, 2001
2 On Emergency Preparedness	Q IV, 2001
3 On Martial Law	Q 1, 2002
4 On Civil Control	Q II, 2002
6 On Jurors	Q II-III, 2002
7 On Local Self-Government's Finance Principles	Q III-IV, 2001
8 On Communal Ownership for Land and Other Natural Resources	Q II-IV, 2002
9 On Delineation of Public and Communal Ownership of Natural Resources	Q II-IV, 2002

Note: Time given for drafting work may be adjusted based upon proposals by ministries and departments

Source: Kyrgyzstan: Interim- National Strategy for Poverty Reduction, Appendix III

# ${\bf Kyrgyzstan:} {\bf Comprehensive\ Development\ Framework}$

## **Involvement Matrix**

D 1	I D 1 :		D: 4	I NT	D.
Development Objectives	Developing Priorities	State	Private Sector	Non-governmental Sector	Donors, International Organizations
Effective and	State governance				
transparent state	reforms				
governance	Democratic				
	institutions				
Fair society	Poverty				
providing human	reduction				
development and protection	Human development				
	Private sector				
	development				
	Strengthening				
	financial system				
	Foreign debt				
	management				
~	Promoting private				
Sustainable	direct foreign				
economic growth	investments	Į			
and development	Foreign trade				
	development				
	Development of				
	transport and				
	informational				
	structure				
	Development of				
	villages, remote				
	areas and				
	mountainous				
	territories				
	Development of				
	small towns				
	Reducing damage				
	from natural				
	disasters				
	Environmental				
	protection				
	Safety of state and				
	people				

Involvement	t Matrix	( <b>-</b> ]	Legend

Heavy Involvement
Some involvement
Little involment

## KYRGYZSTAN: IACD

## **GEF Projects**

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

Single 0	Country Projects - 2 Projects							
Country	Project Name	Region	Focal Area	Agency	Project Type	GEF Grant (US\$M)	Project Stage	Details & Documents
Kyrgyzstan	Biodiversity Strategy & Action Plan and National Report to the COP	ECA	Biodiversity	IBRD	Enabling Activity	0.108	CEO Approved	蓝
Kyrgyzstan	Enabling Kyrgyz Republic to Prepare its First National Communication in Response to its Commitments to UNFCCC	ECA	Climate Change	UNDP	Enabling Activity	0.332	CEO Approved	111
	Subtotals for	the Result				0.440	2 Projects	
Regional a	and Global Projects - 2 Projects							
Country	Project Name	Region	Focal Area	Agency	Project Type	GEF Grant (US\$M)	Project Stage	Details & Documents
Regional	d Environmental Management in the Basin	ECA	International Waters	IBRD	Full Size Project	12.025	CEO Endorsed	盂
Regional	Central Asia Transboundary Biodiversity Project	ECA	Biodiversity	IBRD	Full Size Project	10.495	CEO Endorsed	蓋
Subtotals for the Result						22.520	2 Projects	

### KYRGYZSTAN: IACD

## **BIBLIOGRAPHY**

Asian Development Bank, Environment Division, Central Asian Environments in Transition, July 1997.

The Asian Development Bank, Kyrgyzstan: Country Strategy And Program Update (2002-2004).

Alberto Valdes Edited, *Agricultural Support Policies in Transition Economies*, World Bank Technical Paper NO. 470, Europe and Central Asia Environmentally and Socially &sustainable Development Series.

ADB, Central Asia: Assessment of ADB Environment Assistance, Prepared by David S. McCauley, August, 2002

ADB, UNDP, UNEP: Concept Paper on Regional Cooperation in Central Asia, Draft 9 April, 2002.

ADB/CAMIN Working Groups: Regional Strategy and Action Plan for Sustainable Mountain Area Development, 2001.

Babaev, Dr. A.G., (ed.) Desert Problems and Desertification in Central Asia, Springer, 1999

CAREC, Central Asia: Progress Review in Implementing of the AGENDA 21, Almaty, 2002.

CAREC, Central Asia on the way to sustainable development, Almaty, 2002.

CGIAR Program Facilitation Unit, Tashkent, CGIAR Collaborative Research Program for Sustainable Agricultural Development in Central Asia and the Caucasus

Federal Research Division, Library of Congress, Area Handbook Series, *Kazakstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan -country studies*, Edited by Glenn E. Curtis, 1997.

ICARDA, ICARDA in Central Asia and the Caucasus

Kyrgyzstan: The Comprehensive Development Framework of the Kyrgyz Republic to 2010, Bishkek, 2001

Kyrgyzstan: Government of Kyrgyzstan, Interim National Strategy for Poverty Reduction, 2001-2003, June 13, 2001

Kyrgyzstan: National Report on Combating Desertification (revised in April 2002)

Kyrgyzstan: Country Situation Paper, Ms. Mira, ADB Domestic Consultant.

UNDP Kyrgyz publication: Investing in People

United Nations, Resident Coordinator System, Kyrgyzstan, *Common Country Assessment of Uzbekistan (CCA)*, United Nations, 2001.

UN Economic Commission for Europe, Committee on Environmental Policy: Environmental Performance Reviews, Kyrgyzstan, UN Geneva, 2000.

USAID, Central Asia Natural Resources Management Project

Vladimir Mamaev, Ph.D., Woods Hole Group, Inc., Sustainable Development in Central Asia: Assessment and Challenges of Agenda 21, Zero Draft Report, August 16, 2001.

World Bank, Country Assistance Strategy Progress Report for the Kyrgyz Republic, November 9, 2001

The World Bank Group, Country Brief, Kyrgyzstan, updated September 2001.

World Bank- Country Notes: Debt Sustainability and Policy Priorities to Ensure Growth in the CIS-7 Countries, February 2002 (Joint exercise of the World Bank, IMF, ADB and EBRD).

World Bank: Kyrgyz Republic, Agriculture and Agribusiness: Growth Opportunities and Obstacles - draft June 30, 2000.