

## **Facilitating Financing for Sustainable Forest Management in Small Islands Developing States and Low Forest Cover Countries**

An analytical report prepared by Indufor  
for the United Nations Forum on Forests

### **Country Case Study: the Kyrgyz Republic**

**Author: Alexander Temirbekov**

**Helsinki  
18 August 2010**

**The views expressed herein are those of the author(s) and do not necessarily reflect the views  
of the United Nations.**

## Table of contents

Introduction .....	1
I. General information about the Kyrgyz Republic .....	4
II. Forests and the forest sector of the Kyrgyz Republic .....	7
A. Forest resources .....	7
B. Forest sector .....	11
C. Economic activities .....	12
III. Forest policies and institutions and inter-sectoral linkages .....	16
A. National forest policy .....	16
B. Forest legislation .....	19
C. Main stakeholders of the sector .....	20
1. Governmental entities involved in forest governance .....	20
2. Forest users and other stakeholders .....	22
D. Climate change policy .....	24
E. Inter-sectoral cooperation .....	25
IV. Financial flows for SFM .....	29
A. State budget allocations .....	29
B. Self-financing activities .....	29
C. Kyrgyz Republic Fund for Nature Protection and Forestry Development .....	30
D. Private sector .....	33
E. International support .....	34
V. Demand for financing for SFM .....	36
VI. Financing gaps and key challenges .....	39
A. Key challenges of forest finance .....	39
B. Conditions for private investment and an enabling environment for financing SFM .....	40
C. Current problems of the private initiatives .....	41
VII. Recommendations .....	43
A. Legislation .....	43
B. Forest management .....	43
C. State forest governance institutional set-up .....	44
D. Forest finance .....	44
E. Personnel .....	44
F. Strengthening of "state-private" (public-private) collaboration .....	45
VIII. Conclusion .....	46
IX. References .....	48

## LIST OF ANNEXES

Annex 1: List of the Working Group and interviewed experts .....	55
Annex 2: Map of administrative divisions of Kyrgyzstan .....	58
Annex 3: Map of the land use in Kyrgyzstan .....	60
Annex 4: Map of the population density of Kyrgyzstan .....	62
Annex 5: Map of the forests of Kyrgyzstan .....	64
Annex 6: Management Organigram of SAEPP .....	67
Annex 7: The scheme of the Kyrgyz forestry sector current funding .....	70
Annex 8: Finance and economic activities of the state forest management units .....	72

## LIST OF FIGURES

Figure 1 Concept of the forestry sector development .....	18
Figure 2 Donors at the time of forestry NAP development in 2005-2006: Support related to forest ecosystems .....	38

## LIST OF TABLES

Table 1	Gross domestic product production in the Kyrgyz Republic (2004-2008) .....	5
Table 2	Total output of agriculture, hunting and forestry in 2004-2008 .....	6
Table 3	Forest covered areas of Kyrgyzstan according to forest growing region .....	8
Table 4	Timber stock by provinces and main species .....	10
Table 5	Annual timber harvest in the state forest .....	10
Table 6	Annual plantations implemented by the SAEPF .....	11
Table 7	FAO estimations on production, import and export of processed products.....	12
Table 8	National Statistics Committee data on forest products processing .....	13
Table 9	Main forest products trade balance .....	13
Table 10	Harvest of medicinal plants according to permits delivered .....	13
Table 11	Forest plots leased to the rural population according to Province.....	15
Table 12	Estimated CO <sub>2</sub> sequestration and costs of reforestation .....	25
Table 13	Budget allocations and special means of the KNAU .....	27
Table 14	Financing of SFM research in 2008.....	28
Table 15	Special means .....	28
Table 16	State budget allocation to State Forest Service (2001–2009) .....	29
Table 17	Special means income (2001-2009).....	30
Table 18	Income and expenditures of the Fund (2005-2009) .....	32
Table 19	Main activities financed by the Fund during 2006–2009 .....	33
Table 20	Foreign financing to the forest sector development.....	34
Table 21	NAP 2006-2010 budget .....	36
Table 22	Structure of the direct foreign investments .....	41

## Abbreviations and acronyms

ADB	Asian Development Bank
CBO	Community based organizations
CDS	Country Development Strategy for 2009-2011
CIS	Commonwealth of Independent States (ex-Soviet Union)
DFID	UK Department for International Development
EC	European Commission
ENGREF	l'Ecole Nationale du Génie Rural, des Eaux et des Forêts, Nancy, France.
ETHZ	Swiss Federal Institute of Technology
FAO	Food and Agriculture Organization of United Nations
FD	Forestry Department of SAEPF
FLEG	Forest Law Enforcement and Governance initiative
FMU	Forest Management Unit = LH
GDP	Gross Domestic Product
GEF	Global Environment Facility
GTZ	Gesellschaft für Technische Zusammenarbeit
HDI	UN Human Development Index
IC	Intercooperation, Swiss Foundation for Development and International Cooperation
IDA	International Development Association of World Bank
IFAD	International Fund for Agricultural Development
IFF	Intergovernmental Forum on Forests
IPF	Intergovernmental Panel on Forests
JICA	Japanese International Cooperation Agency
KGS	Kyrgyz Som, National currency of KR
KIRFOR	Kyrgyz-Swiss Forestry Support Project
KR	Kyrgyz Republic
LFCC	Low Forest Cover Countries
LH	<i>Leshoz</i> = forest management unit in state forests
MDG	Millennium Development Goals
NB	National Bank of KR
NFG	Norwegian Forest Group
OFA	Oblast (Province) Forest Administration Department
REDD	Reduction of Emissions from Deforestation and Forest Degradation
RFEPFD	Republican Fund for Environment Protection and Forestry Development
SAEPF	State Agency for Environment Protection and Forestry under the Government of the Kyrgyz Republic
SDC	Swiss Agency for Development and Cooperation
SFF	State Forest Fund = woodlands under the management of the state forestry
SFM	sustainable forest management
SFS	State Forest Service
SIDA	Swedish International Development Agency
SIDS	Small Island Developing States
SU	Soviet Union
TACIS	EC Technical Assistance to CIS countries
TIKA	Turkish International Cooperation Agency
UN	United Nations
UNDP	United Nations Development Programme
UNFF	United Nations Forum on Forests
USAID	United States Agency for International Development
USD	United States Dollar
WB	World Bank

The average exchange rate for 2009 has been fixed as 42.89 KGS per 1 USD as per NB

## Introduction

Loss of forest cover is a major global concern. Both social and economic considerations drive land use and forest management decisions. According to multiple studies, various direct and indirect factors cause deforestation, the most common factor being land use change from a less profitable use, such as forests/forestry, to a more profitable one, such as agriculture or animal husbandry. The difference in profitability is real, at least in the short term, but often agricultural subsidies or other policies that favour agricultural expansion cause this disparity.

Sustainable forest management (SFM) is a target in forest development among global forest organizations, such as the Intergovernmental Panel on Forests (IPF), Intergovernmental Forum on Forests (IFF), and United Nations Forum of Forests (UNFF).

In October 2009, the Member States of the UNFF adopted a decision on means of implementation of sustainable forest management during a special session of the ninth session of the UNFF. The decision launched two initiatives to catalyze funding for SFM. The first initiative was the establishment of an Intergovernmental Expert Group, which studies existing financing strategies for SFM and ways to improve access to funds. The second initiative was a facilitative process on forest financing to assist countries in mobilizing funding from all sources in order to address the special needs of countries that have faced continuous decline in forest financing. Specifically, these include Small Island Developing States (SIDS) and Low Forest Cover Countries (LFCCs).

Although the forest cover of SIDS and LFCCs is not very significant on a global scale, the forests and trees are extremely important for the well-being of the inhabitants of these countries. In many such countries, the forests contribute to the national economy through trade of forest- and non-forest products and through local consumption. Often rural people are highly dependent on the forest for products, such as fuelwood, and non-wood forest products, such as fodder. In addition, the forests and trees provide important watershed and other ecosystem services. These forests are indeed of global importance in terms of their role in the conservation of biological diversity, in particular concerning endemic species and genetic variability.

The Reducing Emissions from Deforestation and Forest Degradation (REDD) mechanism currently under development specifically addresses this issue by proposing additional income generated from forest conservation and SFM, thus increasing the profitability of keeping land under forest cover. The REDD mechanism is being developed for use in developing and transition countries such as Kyrgyzstan. New and emerging climate change- and forest-related financing can be particularly important to SIDS in their adaptation to climate change risks (e.g., coastline stabilization and management). Similarly, financing for increasing forest cover through afforestation and reforestation (in the form of plantations) can be an important opportunity to LFCCs.

Indufor won a competitive bid to support the UNFF process entitled “Facilitating Financing for Sustainable Forest Management in SIDS and LFCC”. Seven case studies in SIDS and LFCCs are part of this process that aims to understand and enhance the financing of sustainable forest management in these countries.

The Kyrgyz Republic is a small country in Central Asia belonging to the LFCC group, having less than 7 per cent forest-covered surface. Kyrgyzstan is a former USSR Republic. After gaining independence in 1991, Kyrgyzstan entered a new era, the so-called post-Soviet transition period, when the young independent country confronted the challenge and opportunity to explore new modalities of social, political and economic organization. This type of country in transition represents a completely new context for business, research and development agencies of the international community.

**The objective** of the present document is to produce an analytical report on forest financing in the Kyrgyz Republic. The study aims to (a) compile all relevant information on forest financing

available in the country and to (b) analyse the current and potential funding sources and flows, as well as the related gaps, opportunities and lessons learned. The study also discusses inter-sectoral linkages.

### Methodology

After the engagement of the national consultant for undertaking the case study, the State Agency for Environment Protection and Forestry under the Government of the Kyrgyz Republic (SAEPF) established a small working group (WG). The WG consists of the following entity and individual representatives:

- Finance and Economic Department of SAEPF
- Forestry Department of SAEPF
- National Statistic Committee
- Independent consultants

Experts from institutions of other sectors have also been involved in the development of the case study (see annex 1):

- Ministry of Finance
- Ministry of Economic Regulation
- Ministry of Transport and Communications
- National Agency of KR on the affairs of Local Self Governance
- National Statistics Committee
- State Committee on Water Recourses Management of the Ministry of Natural Resources
- Pastures Department of the Ministry of Agriculture
- Republican Fund for Nature Protection and Forestry Development
- Association of Forest Products Processing Enterprises of KR
- Association of Forest and Land Users of Kyrgyzstan
- Kyrgyz National Agrarian University
- Forest Research Institute
- International organizations and projects active in Kyrgyzstan
- Environmental NGOs

The country case study represents an example of a LFCC, and the objective is to increase the understanding of forest financing in the Kyrgyz Republic and in the respective country group.

The general case study process includes the following **steps**:

1. Define a country-specific outline for the case study.
2. Establish an expert WG and convene meetings of the key experts for information and brainstorming and for securing necessary contacts for the case study and data gathering process.
3. Gather and provide forest finance data and documentation.
4. Provide a first draft for Indufor Oy's comments and after approval, distribute the draft to the WG experts for comments.
5. Debate the first draft report at the Experts' Round Table.
6. Organize a one-day workshop to debate the issues in a larger circle of professionals.
7. Make arrangements for an Indufor representative to attend the workshop.
8. Provide a second draft, enhanced by the workshop outcomes and comments from the country experts, Indufor and UNFF.
9. Provide a final version, enhanced by comments from the WG experts, Indufor and UNFF.
10. Provide comments to the respective macro study on forest financing in LFCCs.

The **methods** used comprise:

- A desk study
- Data compilation both from existing databases and the Internet
- Analysis of the compiled data
- Individual and group interviews and meetings of key experts
- A workshop of experts

DRAFT



## I. General information about the Kyrgyz Republic

Kyrgyzstan, officially named the Kyrgyz Republic (*Kyrgyz Respublikasy*), is a landlocked republic in the eastern part of Central Asia. It is bordered in the north by Kazakhstan, in the east by China, in the south by China and Tajikistan, and in the west by Uzbekistan. Bishkek is the capital and largest city.

The total area of Kyrgyzstan is 199,900 km<sup>2</sup>. The country is almost completely mountainous. More than half of Kyrgyzstan lies at an elevation higher than 2,500 m, and only about one eighth of the country is lower than 1,500 m. Glaciers and permanent snowfields cover up to 4 per cent of Kyrgyzstan's total land area. The underlying seismic belt causes frequent earthquakes.

Kyrgyzstan is located at the juncture of two great Central Asian mountain ranges - the Tien-Shan and the Pamir. These two chains are geologically separated from each other in southern Kyrgyzstan, between the Alai Mountains of the Tien-Shan and the Trans-Alai Range of the Pamir. The Trans-Alai Range, which is the northernmost part of the Pamirs, forms part of Kyrgyzstan's southern border with Tajikistan. The main ridge of the Tien-Shan extends along Kyrgyzstan's eastern border with China on a north-eastern axis. Victory Peak is the highest peak in the Tien-Shan range at an elevation of 7,439 m. Located on the Kyrgyz-China border in north-eastern Kyrgyzstan; Victory Peak is also the highest point in Kyrgyzstan. The Fergana Valley in the west and the Chu Valley in the north are among the few significant lowland areas in Kyrgyzstan.

The country's climate varies by region. The climate is subtropical in the Fergana Valley and temperate in the northern foothill zone. The lower mountain slopes have a dry continental climate, as they receive hot desert winds from Kazakhstan and Uzbekistan, whereas the highest mountain elevations have a polar climate. In the valleys, the average daily temperature in July is 28° C (82° F). In January, daily averages are as low as -14° C (7° F). Conditions are much colder at higher elevations, where in July the average daily temperature is 5° C (41° F) and in January, -28° C (-18° F). Precipitation is between 100 and 500 mm in the valleys and from 180 to 1,000 mm in the mountains.<sup>1</sup>

Water ecosystems play a vital role in the ecologic and economic stability of the country and the whole region of Central Asia. There are more than 30,000 rivers and about 1,923 lakes in Kyrgyzstan. Total annual water flow in Kyrgyzstan's rivers amounts to around 50 km<sup>3</sup> of water. The potential hydropower resources are estimated to be 15,500 thousand kW.

Glaciers and snowfields on the top of the mountains are of large importance to water supply and the regulation of the region's climate. There are 8,200 glaciers in Kyrgyzstan, with a total area of 8,169.4 km<sup>2</sup>, occupying 4.2 per cent of the country's territory. The Kyrgyz Academy of Sciences estimates the water reserve of Kyrgyzstan's glaciers to be 650 billion m<sup>3</sup>.<sup>2</sup>

Concerning administrative territorial division, Kyrgyzstan consists of seven provinces and 40 districts (see [annex 2](#)). There are 1,835 settlements, including 1,810 villages and towns; 25 cities, which are governed by 472 *aiyl okmotus* (rural self-governance bodies); and 25 city administrations, with 1,339 heads of local self-governance bodies.<sup>3</sup> However, due to ongoing decentralization and administrative reform, these figures are still not final.

The population of the KR (as of 01 January 2010) is 5,368,000 people. The capital of Kyrgyzstan is Bishkek (819,100 people). 65 per cent of the population is rural, and 35 per cent is urban. People from 80 different ethnic groups live in this country. The main indigenous ethnic groups are as follows: Kyrgyz – 68.9 per cent, Uzbek – 14.4 per cent, Russian – 9.1 per cent, Dungan – 1.2

<sup>1</sup> [www.kyrgyzstan.orexca.com](http://www.kyrgyzstan.orexca.com)

<sup>2</sup> Kyrgyz Academy of Sciences (1987), Atlas of the Kyrgyz Republic, Moscow.

<sup>3</sup> Intercooperation Kyrgyzstan (2007), Legal and institutional base for the forestry development in the Kyrgyz Republic. Bishkek.



per cent, and Uigur – 1 per cent. The density of population varies among areas, depending on the environmental conditions (see annex 4). On average, it is 26.5 people per one km<sup>2</sup>.<sup>4</sup>

According to some estimates, more than 300,000 people live within the state governed forest lands, and more than one million live within a five km distance from forests<sup>5</sup>.

In 2009, the GDP of Kyrgyzstan was KGS 196,423.1 million or USD 4,591.5 million (Table 1). This represents a 2.3 per cent growth compared with 2008. GDP per capita is USD 888, showing 1.3 per cent growth compared with the previous year.

**Table 1 Gross domestic product production in the Kyrgyz Republic (2004-2008)**

<b>Years</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Millions of KGS	93 350.7	100 899.2	113 800.1	141 897.7	187 991.9
Millions of USD	2 187.7	2 460.3	2 833.66	3 803.2	5 140.6
Exchange \$1 =	42.67	41.01	40.16	37.31	36.57

The gross industrial production in 2009 was estimated to be KGS 97,249 million or USD 2,273.2 million (93.6 per cent of that in 2008). Gross production of agriculture, forestry and hunting in 2009 was KGS 110,100.2 million or USD 2,573.6 million (107.4 per cent of 2008)<sup>6</sup>.

2009 croplands are estimated at 1169.6 thousand ha (9.3 thousand ha more than in 2008, or a 0.8 per cent increase). 97.4 thousand ha of arable land were not used due to the following reasons: 53.2 thousand ha consisted of very dry areas; 18.9 thousand ha were on remote, stony lands; 11.2 thousand ha suffered from lack of watering due to a damaged irrigation system; 5.7 thousand ha were located on salty swamp lands; and 0.2 thousand ha suffered from lack of funding.<sup>7</sup> Annex 3 presents the general scheme of land use. The total area of arable land in the country is 1,267 thousand ha, or 6.38 per cent of the national territory.

Livestock (sheep, horse, cattle) breeding is one traditional domain of agricultural activities of Kyrgyz farmers. The total area of pastures is 9.1 million ha, or 45 per cent of the national territory; more than 3.2 million ha, or 29 per cent of the total area, have been degraded and depleted.<sup>8</sup>

The increase in Hunting and Forestry output in 2006-2007 is attributable to the changes in the political context in the country and in the State Agency for Environment Protection and Forestry (SAEPF) leadership. The hunting sector in particular generated additional income after those changes.

The State Agency for Environment Protection and Forestry has the authority to issue licences for hunting tours. Prior to 2008, the price of the licence to hunt the Marco Polo mountain sheep was USD 5,000, which the SAEPF assumed the private tour operators would reimburse to them (the latter organized tours for foreign hunters who would come to hunt the Marco Polo sheep). However, private operators always complained about the exorbitant price for the hunting licence and attempted to postpone licence payments.

After the revolution of 2005, the new leadership of SAEPF forced all the local hunting tour operators to settle their debts before the receipt of the new hunting licences. However, two years later, local tour operators managed to lobby the Government for a considerable reduction of the licence fees (from USD 5,000 to 50), and this reduced generated income. Table 2 shows this under the 2008 column.

<sup>4</sup> [www.stat.kg](http://www.stat.kg)

<sup>5</sup> SAEPF, Intercooperation Kyrgyzstan (2007), 60 years to Forestry of Kyrgyzstan, Bishkek, p.30.

<sup>6</sup> National Statistic Committee of KR (2010), Socio-economic situation in the Kyrgyz Republic: January - December 2009.

<sup>7</sup> Ibid.

<sup>8</sup> SAEPF, GEF, UNDP (2008), Fourth National Report on Biodiversity of the Kyrgyz Republic, Bishkek

**Table 2 Total output of agriculture, hunting and forestry in 2004-2008**

<b>Years</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
	<i>in million of KGS</i>				
Agriculture	57 427.3	62 325.2	71 098.7	88 158.2	110 294.1
Including					
Crop production	32 031.3	34 496.3	40 739.4	50 436.4	63 137.5
Livestock	25 396.0	27 829.0	30 359.3	37 721.8	47 156.6
Agro-services (veterinary, seeds treatment and supply, etc.)	893.3	958.5	1004.3	1578.2	1723.0
Hunting and Forestry	98.6	95.7	174.3	149.6	82.5
<b>Total</b>	<b>58 419.2</b>	<b>63 379.5</b>	<b>72 277.3</b>	<b>89 886.1</b>	<b>112 099.6</b>
Millions of USD	1 369.09	1545.46	1799.73	2409.16	3 338.79
Exchange 1\$ =	42.67	41.01	40.16	37.31	36.57

On average, the SAEPF issued about 60 Marco Polo sheep licences annually between 2004-2008. In addition to the Marco Polo sheep, the Siberian goat, Roe deer, wild boar and a number of birds have been subject to licensed hunting, with a smaller licensing fee that has not generated much income for the SAEPF. Wolves are considered to endanger cattle and sheep farming, especially in the winter, so the SAEPF actually pays KGS 1,000-1,500 (from USD 23.30 to USD 35) per head.

Overall investments in 2009 accounted for KGS 38,690.5 million, or USD 904.4 million (119.7 per cent of 2008). Investments into agriculture, hunting and forestry in 2008 amounted to KGS 737.2 million (USD 17.2 million). In 2009, such investments totalled KGS 887.4 million (USD 20.7 million). This is 2.3 per cent annual growth.

The foreign trade, in 2009, was USD 3,856.5 million (USD 1,169.8 million - exports and USD 2,686.7 million - imports).

At the beginning of 2010, the number of registered unemployed persons was 61,400 (an 8.6 per cent decrease from the previous year). The official unemployment rate in KR is 2.6 per cent of the economically active population.

The average monthly salary in 2009 was KGS 6,049 (USD 141.40). It grew 15.9 per cent from 2008 (a 7.8 per cent growth in real consumer prices). The annual average minimum subsistence level wage in 2009 was KGS 3,263.2 or USD 76.20 (+1.9 per cent from 2008).<sup>9</sup>

According to UNDP reports, poverty remains high in the Kyrgyz Republic, and the level of extreme poverty is moderate. In 2007, an estimated 39.9 percent of the population lived below the poverty line (as defined by consumption per capita), and 9.1 percent lived in extreme poverty. According to a 2009 survey, Kyrgyzstan is considered to be a country with medium human development level, and is ranked 120th in the human development index.<sup>10</sup>

In 2008, Kyrgyzstan adopted a mid-term Country Development Strategy for 2009-2011 (CDS) which defines the major priorities of the country's development: (a) increase of economic potential, (b) effective public service (governance), (c) meaningful social development, and (d) ecological security. This development document reflects the country's commitment to achieving Millennium Development Goals (MDGs). Many MDG indicators are integrated in the Kyrgyz CDS.

<sup>9</sup> Ibid.

<sup>10</sup> UNDP (2009), *Human Development Report 2009*.

## II. Forests and the forest sector of the Kyrgyz Republic

### A. Forest resources

The forests of Kyrgyzstan are predominantly mountain forests. They contain rather fragile ecosystems, the management of which requiring, apart from the availability of relevant experience and knowledge, the application of both reasonable and cautious approaches and methods. According to the Constitution of the Kyrgyz Republic, forests in Kyrgyzstan are state-owned property. The State Agency for Environment Protection and Forestry under the Government of the Kyrgyz Republic is in charge of forest management functions.

The forest lands managed by the SAEPF form the so-called “State Forest Fund” (SFF) (in other words, a Forest Estate), with a total area of 3,279.3 thousand hectares (according to the last forest resources assessment data from 2003), which is about 16 per cent of the territory of the country. However, the forested area of the SFF comprises only 863.6 thousand ha, (4.32 per cent of the national territory), of which the share of artificially planted forest is 63.4 thousand ha. The rest of the forest lands constitute the so-called “non-forest lands”, with an area of 2,147.7 thousand ha. One part of these non-forest lands is conventionally used for agroforestry purposes and registered as follows: 1,130.5 thousand ha of pastures, 9 thousand ha of arable lands, 14.8 thousand ha of hayfields, 1.2 thousand ha of orchards and gardens and 4.5 thousand ha of farmstead. Another part of these non-forest lands includes 3.2 thousand ha of bogs and marshes, 2.4 thousand ha of sands, 24.6 thousand ha of glaciers, 2.7 thousand ha of roads, 39.01 thousand ha of waters and 915.8 thousand ha of other land types<sup>11</sup>.

However, the latest remote sensing data (classified satellite imagery of 2003-2008) indicate that the forest-covered area is larger than estimated in the previous (2003) inventory: 1,391.1 thousand ha. Only 59 per cent of it is within the limits of the SFF; 22 per cent is within the territories of municipalities, and 19 per cent is within the confines of the state land reserve. This means that more than 500,000 ha of forests are located outside of the state governed forest lands, and nobody is responsible for managing those resources. Thus, it appears that the Kyrgyzstan forested territory in reality is 6.97 per cent of the national territory (instead of 4.32 per cent as previously thought)<sup>12</sup>. (See [annex 5](#))

At present, a national forest inventory is taking place in Kyrgyzstan according to Governmental Resolution # 145 dated 11 April 2008. The Food and Agriculture Organization of the United Nations (FAO) is supporting local foresters to implement it. Field data collected by 2011 will present updated information on Kyrgyz forest resources.

In spite of a limited forested area, the forests of Kyrgyzstan play a very important protection and ecological role in addition to producing timber, fruits and other valuable forest products.

---

<sup>11</sup> SAEPF, Intercooperation (2007), *60 years to the forest sector of Kyrgyzstan!* (RUS), Bishkek.

<sup>12</sup> Intercooperation Kyrgyzstan (2009). *Map: Location of the forests of the Kyrgyz Republic*, Bishkek.

**Table 3 Forest covered areas of Kyrgyzstan according to forest growing region**

<i>Forest growing region</i>	<i>Shrubs</i>	<i>Juniper</i>	<i>Spruce, fir</i>	<i>Walnut</i>	<i>Pistachio</i>	<i>Other broad-leaved</i>	<i>Total</i>	<i>Percentage of national territory</i>
	<i>hectare</i>							
I Turkestan–Alai	95 300	230 700	1 500	200	1 100	3 900	<b>332 700</b>	1.67
II Fergana - Alai	10 200	17 000	5 100	200	0	4 000	<b>36 500</b>	0.18
III Fergana – Chatkal	155 500	40 600	18 500	46 600	56 300	101 500	<b>419 000</b>	2.10
IV Chatkal	31 400	72 900	1 300	0	0	3 600	<b>109 200</b>	0.55
V Talas	16 800	37 300	1 900	0	100	8 600	<b>64 700</b>	0.32
VI Chuy - Kemin	47 300	16 900	16 900	0	100	2 600	<b>83 800</b>	0.42
VII Issyk-Kul	36 400	31 400	57 900	0	0	9 500	<b>135 200</b>	0.68
VIII Intenal Tien-Shan	78 000	56 800	46 300	0	0	28 900	<b>210 000</b>	1.05
<b>Total</b>	<b>470 900</b>	<b>503 600</b>	<b>149 400</b>	<b>47 000</b>	<b>57 600</b>	<b>162 600</b>	<b>1 391 100</b>	<b>6.97</b>
Percentage of the territory	33.9%	36.2%	10.7%	3.4%	4.1%	11.7%	100.0%	

In the Kyrgyz Republic, specific forests are assigned the following protective roles:

- Water protection (forest belts on river banks, on the coast of lakes and alongside other water areas).
- Environmental protection (anti-erosion forests, road medians, forests in desert and mountainous areas).
- Sanitation for water supply protection or recreational usage (urban forests, parks, forests in sanitary zones around settlements, forests in the first and second belts of sanitary protection of the water supply sources, forests in the sanitary zones of health resorts).
- Special protection of natural territories (reserves and reserve zones, national parks, enclosed woods, valuable forest massifs, forests having research significance, including genetic reserves and natural monuments, walnut-fruit, juniper and pistachio forests<sup>13</sup>).

Due to their rich biological diversity, the significance of Kyrgyz forests extends far beyond the national boundaries; some of these forests are of global importance. Unique walnut-fruit forests of southern Kyrgyzstan, for instance, contain rich genetic resources of ancestral varieties of walnuts, apple trees, grapes, cherry plums, pears, pistachios and almonds. These genetic resources are necessary for breeding new varieties. In this sense, these forests represent value as preservers of an enormous genetic trove.<sup>14</sup>

A network of specially protected natural territories (SPNT) has been established in Kyrgyzstan for the conservation of biodiversity. Today in Kyrgyzstan, there are 84 SPNTs with a combined area of 1 189 507.4 ha, i.e., 5.97 per cent of the national territory of KR.

SPNTs are subdivided into four categories, which the International Union for Conservation of Nature uses, according to function.

<sup>13</sup> Forest Code of The Kyrgyz Republic (as of July 8, 1999 # 66), article 30.

<sup>14</sup> SAEFP, GEF, UNDP (2008), *Fourth National Report on Biodiversity of the Kyrgyz Republic*, Bishkek

Category I is Natural Reserves. There are 10 reserves with a combined area of 600 760.5 ha in the country:

1. Sary-Chelek Biosphere Reserve
2. Padysh-Ata Reserve
3. Kulun-Ata Reserve
4. Kara-Buura Reserve
5. Surma-Tash Reserve
6. Issyk-Kul Reserve
7. Besh-Aral Reserve;
8. Naryn Reserve
9. Karatal-Japyryk Reserve
10. Sarychat-Ertash Reserve

Category II is National and Natural Parks. There are one national natural park and eight state natural parks, with a total area of 287 173.2 ha.

Category III is Nature Monuments. There are 18 such areas in Kyrgyzstan.

Category IV is Protected Biotopes and Species. These different protected territories occupy an area of 301 426.7 ha.<sup>15</sup>

The general State Forest Fund stock, both coniferous & deciduous, is 28,840 million m<sup>3</sup>. The annual growth in those forests is 686,028 m<sup>3</sup>.<sup>16</sup> However, during case-study discussions, workshop representatives of the Department on Forest Ecosystem Development stated that total stock was 40 million m<sup>3</sup>. This declaration provoked lively discussion about variability of the data in different state institutions.<sup>17</sup> Nevertheless, this new data has not been published anywhere yet. Thus, the only available reference comes from the research of the sector done by the Kyrgyz-Swiss forestry support project (Table 4).

There is wide consensus that the primary designation of the Kyrgyz forests is nature protection. Consequently, the forest legislation of Kyrgyzstan clearly reflects this. In the last years, the importance of nature protection has resulted in a temporary ban on harvesting some tree species (e.g., walnut, juniper). Thus, silvicultural activities have been reduced to tending to sanitation issues, felling and forest regeneration. The productive function of forests has always been considered as secondary, and the data on annual stock growth and natural forest aging are not taken into consideration in timber harvesting (Table 5).

Reforestation has always been considered the main activity of the state forest sector. The main funds have always been allocated to cover expenses to plant new forest.

---

<sup>15</sup> Data of the Specially Protected Territories Unit of SAEPP

<sup>16</sup> Bern University of Applied Sciences, School for Architecture, Civil and Wood Engineering HSB (2004), *Value Added Chain Timber Industry – Kyrgyz Republic*, Biel.

<sup>17</sup> Report on the Indufor Workshop on the Kyrgyzstan case study (May 2010), Bishkek.

**Table 4 Timber stock by provinces and main species**

	<i>Issyk-kul</i>	<i>Naryn</i>	<i>Osh</i>	<i>Jalal-Abad</i>	<i>Batken</i>	<i>Talas</i>	<i>Chui</i>	<i>Kyrgyzstan</i>	<i>Percentage of stock</i>	<i>Per species</i>
<i>in thousand m<sup>3</sup></i>										
Spruce	8 515	3 245	518	1 265	0	102	1 688	15 333	53.2	131.6
Pine	278	0	0	0	0	0	57	335	1.2	141.2
Walnut	0	0	165	2 652	0	0	0	2 817	9.8	69.6
Birch	83	22	21	173	9	18	18	344	1.2	46.9
Maple	1	0	173	1 039	0	3	2	1 218	4.2	41.7
Elm	90	10	27	18	0	103	28	276	1	46
Poplar	63	58	9	455	2	170	15	772	2.7	71.7
Fruit	3	0	46	518	4	12	17	600	2.1	9.7
Other	357	431	241	3 283	1 580	156	97	7 145	24.8	12.8
<b>Total</b>	<b>9 390</b>	<b>3 766</b>	<b>200</b>	<b>9 403</b>	<b>1 595</b>	<b>564</b>	<b>1 922</b>	<b>28 840</b>	<b>100</b>	<b>34.5</b>
Coniferous	8 848	3 303	363	3 183	1 540	125	1 788	20 150		
Broadleaved	255	94	494	5 240	16	309	85	6 493		
Shrub	287	369	343	980	39	130	49	2 197		
<b>Total</b>	<b>9 390</b>	<b>3 766</b>	<b>200</b>	<b>9 403</b>	<b>1 595</b>	<b>564</b>	<b>1 922</b>	<b>28 840</b>		

**Table 5 Annual timber harvest in the state forest**

	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Harvested, wood, m <sup>3</sup>	35 765.7	36 063.3	27 277.2	26 193.7	17 799.4	19 193.9	15 869.8	21 182.7
Industrial wood, m <sup>3</sup>	-	11 000	-	10,464.8	7 501.5	6 986.2	5 507.6	5 729.5
Fuel wood, m <sup>3</sup>	-	25 063.3	-	15,728.9	10 297.9	12 207.6	10 362.2	15 453.3

As shown in Table 6 the area of new plantations on the state forest lands is gradually decreasing. This is due to the reduction of free land area suitable for new forest plantations and the intensive use of non-forested mountain lands for grazing. At the same time, the area of new plantations outside the state forest lands is increasing. Such tree plantings always involve difficult negotiations with the local governments, since plantations reduce regular agriculture production with regard to livestock breeding, and can produce significant benefits in the form of timber sales only in the long term. That is why the area of such plantations varies from place to place and from year to year. Nevertheless, it is clear that many local governments have already recognized and accepted the value of plantations on their property.



**Table 6 Annual plantations implemented by the SAEPF**

	2002	2003	2004	2005	2006	2007	2008	2009
Plantation, ha	3 061.2	3 349.3	3 248.5	3 152.3	3 027.7	2 779	3 021	2 814
On the territory of SFF, ha	3 056.6	3 310.3	3 146.5	3 076.8	2 942	2 193	2 057	2051
Outside SFF, ha	5.0	39.0	102.0	75.5	85.7	586	964	763

## B. Forest sector

The forestry sector in this country was established in the Soviet times in 1947, but the local forest uses and forest management go back even further in time.

In Kokand Khanat times (1710-1876), forests and meadows on the territory of the present Kyrgyzstan were under the supervision of Khan's "forest chiefs" (*beks*), who had special forest wardens (*korukchu*). *Beks* and *korukchu* collected different kinds of taxes and payments for fuelwood (*otun-pulu*) and payment for construction timber (*jygach-pulu*). Local residents were to provide essentially free labour during logging activities. Special rules for hunting (known as *shariy*) existed then. Thus, we see that the basic elements of forest resource use, organization and governance were already in existence three hundred years ago.

After the Russian Empire conquered these territories in the nineteenth century, Russian researcher A.F. Middendorf (1882) described the forest resources. In 1885, Captain Zalesky's team conducted the first topographical mapping and provisional inventory. The Russian Geographic Society in St. Petersburg published a monograph entitled "Turkestan" in 1886, with new information about the indigenous peoples and natural resources of Central Asia. The Turkestan Forest Department ordered the first forest inventory activities from 1889 to 1897.

In 1892, a decree of the Russian Emperor endorsed the "Regulations on Turkestan Governance", and a Governor General was placed in Tashkent. In 1902, the Russian Ministry of Land Use and State Property issued "Instructions on the state property and agricultural management". Much attention was devoted to conservation, inventory, management planning, afforestation activities, forest products trade and taxation. A Department on Land Use and the State Property in Tashkent was in charge of forest governance then. The Instructions stated that, in addition to irrigation of lands in the steppes to promote crops, the Department was to keep sound existing mountain forests. The forest guard number was increased by 50 per cent, and 14 forest rangers were established to prevent resource annihilation through misuse. The forest guards were preferably recruited from inner Russia.

After the October 1917 Revolution in Russia, the forest sector was organized like the other branches of the Soviet economy, with a strict vertical hierarchy of a centrally planned economy.

After dissolution of the USSR in 1991, Kyrgyzstan gained its independence and entered into a transitional period, which is characterized by progressive economical liberalization and rapid societal democratization and politization.

Today, after numerous changes in the structure of the national forest administration, the forestry sector is facing new challenges that have emerged in conjunction with a new market economy (which itself led to a new socio-political organization of Kyrgyz society). The demand for energy resources and fodder for livestock is growing in rural areas, and, therefore, the use of forest resources has become a major source of livelihood for the majority of local people.



At present, the State Agency for Environment Protection and Forestry unites 91 organizations representing national, regional and local levels. The total personnel of 2 270 persons at SAEPF includes:

- 61 Central Office employees
- 124 Department of Game Resources Regulation employees
- 1256 Forest management unit (*Ieshoz* (LH)) employees
- 154 National parks employees
- 50 Forest inventory and management planning Department employees
- 28 Issyk-Kul Biosphere Territory employees
- 275 Nature Reserve employees
- 5 Republican Fund of Nature Protection and Forestry Development employees
- 8 Local branches of the Fund employees
- 309 Territorial Departments of Environment Protections and Forestry employees

Additional to this permanent staff are about 3 000 workers engaged annually to implement various seasonal forest activities.

### C. Economic activities

Regardless of the dominant forest protection strategies, certain economic activities have been implemented in the productive forests. Some data on the economic activities and trade of Kyrgyz forestry in 2008 are presented in Table 7, Table 8 and Table 9:<sup>18</sup>

**Table 7** FAO estimations on production, import and export of processed products

#	<i>Production</i>	<i>m<sup>3</sup></i>		
1	Round Wood	27 300		
2	Sawn Wood	60 000		
3	Wood Fuel	18 000		
#	<i>Imports</i>	<i>m<sup>3</sup></i>	<i>Value / thousand US dollars</i>	
1	Round Wood	4 000		368
2	Sawn Wood	106 900		11 467
3	Wood Based Panels	34 446		11 210
4	MDF	1 921		496
5	Fibreboard	8 600		4 308
#	<i>Exports</i>	<i>m<sup>3</sup></i>	<i>Value / thousand US dollars</i>	
1	Round Wood	300		341
2	Sawn Wood	2 012		207

<sup>18</sup> <http://faostat.fao.org/site/626/>

**Table 8 National Statistics Committee data on forest products processing<sup>19</sup>**

<i>Items</i>	<i>Production, m<sup>3</sup></i>		<i>Percentage to previous year</i>
	<i>2008</i>	<i>2009</i>	
Sawn timber	60 395.0	88 182.9	146.0
Wooden windows and frames; doors and frames; thresholds	31 200	34 900	111.8

<i>Items</i>	<i>Production, millions of US dollars</i>		<i>Percentage to previous year</i>
	<i>2008</i>	<i>2009</i>	
Timber processing and wooden items production	3.8	16.4	434.5
Furniture	9.9	11.8	120.0

**Table 9 Main forest products trade balance<sup>20</sup>**

<i>Commodity</i>	<i>Export, thousand USD</i>		<i>Trend %</i>	<i>Import, thousand USD</i>		<i>Trend %</i>	<i>Balance</i>	
	<i>January-November 2008</i>	<i>January-November 2009</i>		<i>January-November 2008</i>	<i>January-November 2009</i>		<i>January-November 2008</i>	<i>January-November 2009</i>
Timber and wooden products, charcoal, and other products	749,50	397,00	53,00	64 347,50	60 582,40	94,00	-63 598,00	-60 185,40
Paper pulp from wood, waste paper, paper, carton and products out of them	6 487,20	6 791,10	104,00	44 843,70	51 702,30	115,00	-38 356,50	-44 911,20

Forests are multifunctional by nature and provide a wide range of products and services that are essential to local people. It is important not only to conserve forests, but also to make a feasible contribution to meeting the needs of the population. They provide local people with firewood and commercial timber, as well as non-timber forest products such as fruit, berries, mushrooms, hay and medicinal plants. The local residents also use forests for livestock grazing, hunting, fishing, bee-keeping, and recreational and tourism services.

In some areas, a considerable portion of the local population is engaged in collecting medicinal plants to sell to private companies, which produce a diverse range of natural remedies sold on the local markets and abroad. SAEPF is responsible for apportioning permits for such activities not only on the territory of SFF, but everywhere. Since this duty has shifted multiple times from one SAEPF Department to another, the data is difficult to extract now. However, some information is available and is presented in Table 10.

**Table 10 Harvest of medicinal plants according to permits delivered**

<i>Species</i>	<i>Amount of harvest per year in kilograms</i>			
	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
Dog rose ( <i>Rosa Canina</i> )	17 650	21 100	80 450	n/a
Hawthorn ( <i>Crataegus</i> )	16 250	2 151	3 250	n/a
Licorice ( <i>Glycyrrhiza</i> )	53 450	74 705	193 000	284 000
Roseroot ( <i>Rhodiola rosea</i> )	6 800	28 700	12 600	n/a
Permits payment in KGS	n/a	1 172 897	946 083	736 424
In USD	n/a	24 987.15	22 172.08	17 957.18
Exchange rate 1\$=	48.45	46.94	42.67	41.01

<sup>19</sup> National Statistic Committee (2010), *Socio-economic situation in the Kyrgyz Republic: January-December 2009 (RUS)*. Bishkek.

<sup>20</sup> Ibid.

According to recently received remote sensing data, it appears that about 1 million people live inside or close to forests in Kyrgyzstan. Human pressure is progressively growing in the current difficult socio-economic conditions in the country. This factor of increasing pressure on forests by fast-growing local populations represents a threat to the very stability of forest ecosystems.

Thus, Kyrgyz foresters had to turn to new more participatory approaches of social forestry. The innovative approach of collaborative forest management (CFM) was developed with the support of the Swiss Forest Project and introduced on an experimental basis in the walnut-fruit forests in 1998. Tripartite cooperation within the frame of a working contract between forest users, state forest management units and local self-governance bodies was developed, tested and subsequently legalized by the Regulations on CFM in 2001.



*"[In the beginning] there were a lot of misunderstandings and fallacies about CFM among the people, and we also feared the results we would get in the future, what benefits and what losses, all of this we did not know. When we signed contracts with the tenants, we admittedly made some mistakes, and then corrected our mistakes the next year by changing some items in the contracts. The tenants also agreed to sign contracts with the aim of getting forest plots according to our instructions, so as to fulfil the Leshoz' plan mainly on reforestation". - Raimjan Kadyrkulov, Director of Uzgen State*

*Forest Management Unit.*<sup>21</sup>

Growing interest of local communities concerning forest governance is shown in the form of leasing of forest lands. According to Forestry Department 2008 data, 324 866 ha of SFF had been leased by 2008 on usufruct terms (except for timber harvest) to 21 400 contractors (multi-year leasing contracts had begun following Resolution of the Government #226 of 1997, which governed the leasing of forest plots) (Table 11). These are mainly family contracts, meaning that livelihoods of up to 50,000-60,000 rural residents depend on sustainability of forest resources. In 2008, the amount of leasing payment was KGS 16 400 thousand (USD 383.36 thousand).<sup>22</sup>



*"...until CFM was introduced, not all people had access to the forest. CFM provided the chance for people to participate in forest management. People provide labour for afforestation, guarding, planting trees, and in return they get forest products such as walnuts, apples, and pistachios, which they then freely sell at the markets".*

*"I got a three-hectare plot of walnut forest. I planted young walnut trees in my plot. Now the planted trees already have a height of three meters. We mow and collect the grass on our plot, and I get six trucks of hay every year. CFM contributes to improving our living standard and is very useful for us. We feed our cattle with the grass from our plot; we gather about 300 kg or more walnuts in one season and sell it on the market for 50-60 Som per kg, and use the money to feed our families. CFM is a useful method in forest management." - Arapov Kubanych, CFM Lessee in Toskol-Ata Leshoz*<sup>23</sup>

<sup>21</sup> Intercooperation (2010), *15 years of the Kyrgyz-Swiss Forestry Support Programme, (RUS)*, Bishkek.

<sup>22</sup> Intercooperation Kyrgyzstan (2009), *Joint Forest Management*, Bishkek.

<sup>23</sup> Intercooperation (2010), *15 years of the Kyrgyz-Swiss Forestry Support Programme, (RUS)*, Bishkek.

**Table 11 Forest plots leased to the rural population according to Province**

<i><b>Number</b></i>	<i><b>Province</b></i>	<i><b>Leased areas, hectare</b></i>	<i><b>Number of contracts</b></i>
1	Chui	7 895	277
2	Batken	70 702	1 496
3	Talas	11 619	24
4	Osh	26 086	1 131
5	Naryn	34 200	278
6	Issyk-Kul	38 954	1 072
7	Jalal-Abad	128 195	15 704
7.1	CFM approach in the walnut-fruit forests	7 215	1 418
<b>Total in the country</b>		<b>324 866</b>	<b>21 400</b>

### III. Forest policies and institutions and inter-sectoral linkages

#### A. National forest policy

Forest governance in Kyrgyzstan did not differ substantially from other sectors in the centrally planned economy during Soviet times. Regardless of the fact that Kyrgyzstan was an independent member of the Union, all decisions pertaining to development plans were taken in Moscow. Being one of the subsidized Union members, Kyrgyzstan had limited possibilities for influencing important decision-making, especially in policy development issues. This included forest sector policies and legislation. Like other Soviet republics, Kyrgyzstan had its own forest legislative framework based on the established ideology. Therefore, no exceptions or irregularities were accepted or supported. The system was complex, rigid, and closed to innovations.

The independence of Kyrgyzstan brought about not only self-government, but also economic disintegration and loss of traditional connections. Deprived of commodities and the necessary raw materials, the industrial sector has simply collapsed. Certain errors in the reform of the agrarian sector led to general deterioration in the livelihoods of the majority of the population. Poverty and unemployment became the main social challenges.

In such a socio-economic setting, the rural population had to turn to available local natural resources, particularly forests. Growing pressure by the local population on forests gradually led to the degradation and depletion of these. Forest governance remaining in the hands of the state suffered from inadequate funding. It became evident that the forest administration was not ready to manage and control the massive exploitation of forests in a sustainable manner.

Change in the political and socio-economic environment caused by transition from the centralized planning system to a market economy put on the agenda the reorientation of the whole forest governance system as far as policy, institutional set-up, legislation, economy and ecology were concerned. After the collapse of the Soviet Union, the forest sector of Kyrgyzstan was left with a forest policy tailored to the needs and capacities of a centralized system of governance, promoting forest protection and conservation over sustainable management and use.

A market economy requires minimal State ownership and control of the productive sectors of the economy, and this implies a re-definition of the roles and responsibilities of public bodies. State withdrawal from productive activities, changes from a centrally planned system to an adaptive enterprise of monitoring and support, and from top-down command-and-control to a participatory bottom-up style of decision-making were the challenges to be implemented. In transitional countries, the forestry sector was not only opening up to the market economy, but also adopting more participatory and pluralistic approaches to forest management. The forest sector found itself in a situation in which it had to adapt itself to a new economic environment and political and legal framework, simultaneously mainstreaming its multifunctional character and promoting sustainability. For the forest sector, this shift resulted in developing a new policy and legal environment supportive of sustainable development of forest resources and industries, restructuring the State Forest Service (SFS), building capacities to support the private sector and promoting public participation.

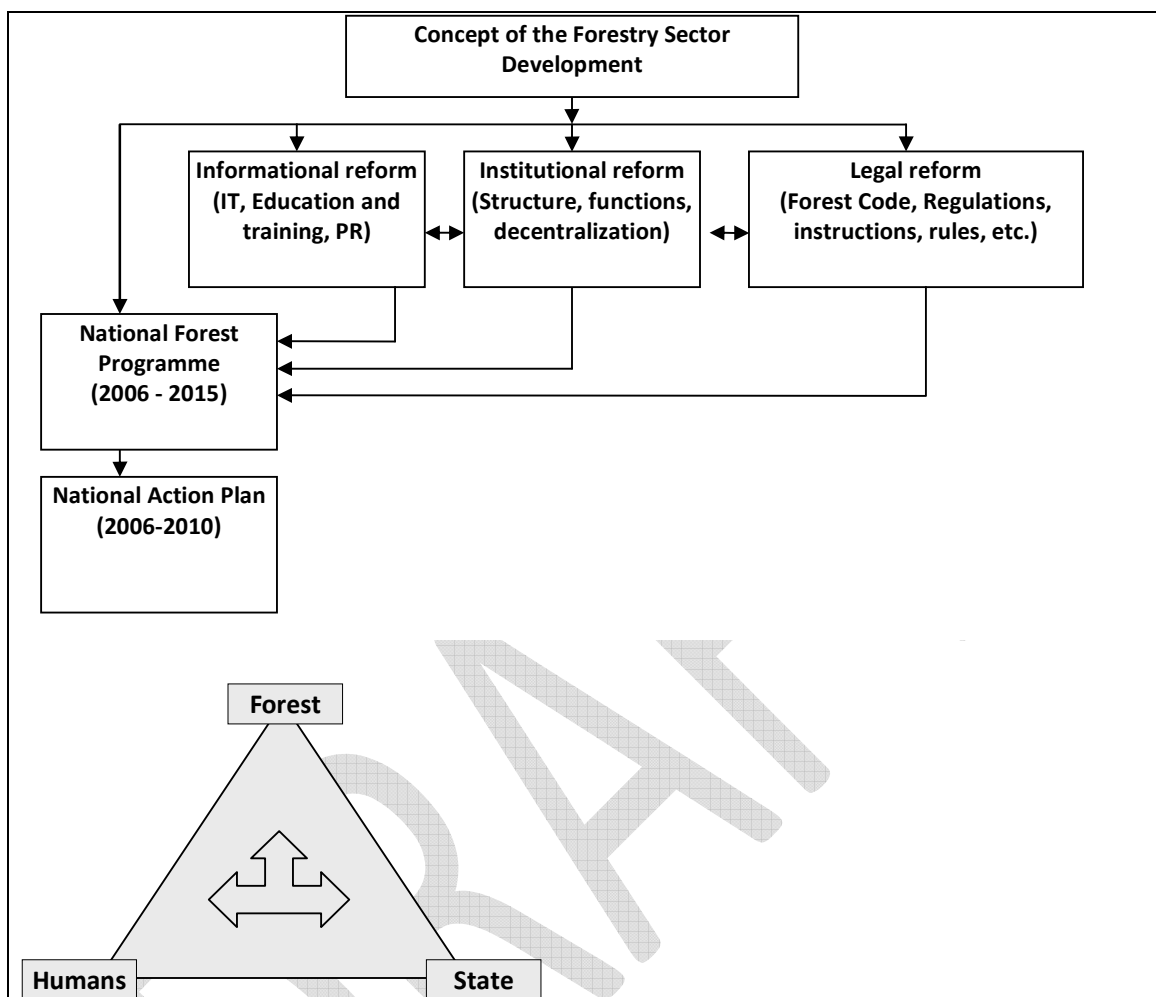
The first Forest Code (1993) of independent Kyrgyzstan was an attempt to legalize provisions of the forest policy adopted at that time. It was oriented mainly towards conservation management. In the late 1990s, the whole system of *Leshozes* seemed to start to crumble due to under-funding from the restricted state budget and limited income opportunities. The state budget allocation to the forest sector included at that time only two items – salaries and Social Fund dues. No funds were allocated to change outdated machinery or to repair rotten infrastructure. Growing human pressure started to threaten the very existence of the forests. At that time, there was no vision of how or in what direction the *Leshoz* system should be restructured. The State Forest Service wanted to keep it virtually unchanged.

The State Forest Service reasoned that the main contributing factor for the decline was the 1993 Forest Code, because this code did not encourage expansion of production, which in turn did not allow for maintenance of the LH infrastructure at the operational level. The SFS considered that the only way to survive was to strengthen LH production activities by adapting the forest law to the new economic environment. In 1999, a new Forest Code legalizing income generation for LH from timber harvesting came into force.

The 6 October 1998 decree of the President of KR entitled “On the new national forest policy in the Republic” became the basis for developing a new forest policy for Kyrgyzstan. It set the task of developing a new National Forest Policy over the period of 2000-2025, establishing the necessary conditions for conservation, reproduction, rational use and sustainable development of the forest sector.

In 1999, the Concept of the Forestry Sector Development (Figure 1) was endorsed. After 5 years of the new forest policy implementation, in 2003, the policy was evaluated with the support of the Kyrgyz-Swiss project. Based on that analysis in 2004, an improved Concept of the Forestry Sector Development was approved, defining the development strategy until 2025. In 2004, the Government endorsed another political document, the National Forest Programme. It defines development goals for 10 years (until 2015), as well as the main measures required to reach them. In 2006, the National Action Plan on Forest Sector Development for 2006-2010 was established. It defines concrete activities, the timeframe, the budget and practical expected results over this period. Thus, the improvement of the forest sector policy forms a logical process of consistent development strategy building following a “road map”. According to the new national forest policy, three types of reform determine sector development: institutional, legal and informational.

**Figure 1 Concept of the forestry sector development**



One widely used definition of sustainable forest management was developed in 2003 at the Ministerial Conference on the Protection of Forests in Europe. This definition has since been adopted by the Food and Agriculture Organization. It defines sustainable forest management as “The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems”.<sup>24</sup>

Based on this concept, the present national forest policy ensures systematic consideration of forestry sector issues from three angles: Forest – Human – State. These integral elements define sector policy mainstreaming aimed at the establishment of sustainable governance and transition of the state forest administration from forest use to efficient management of resources in order to conserve and increase forest resources contributing to local socio-economic development.

The Forest Code of the Kyrgyz Republic permits state-owned forests, municipal forests and private forests. The Code allows private individuals to grow plantation forests on their own lands. However, at present, few private landowners have decided to shift their land use from crop

<sup>24</sup> [http://en.wikipedia.org/wiki/Sustainable\\_forest\\_management](http://en.wikipedia.org/wiki/Sustainable_forest_management)



growing and livestock breeding to tree plantations. This is because it would be a long-term investment that would only be profitable after a minimum of fifteen years (using poplar as an example). The fact is that there are no private forests in Kyrgyzstan yet, but it should be borne in mind that the Republic is only 19 years old.

As mentioned above, the latest remote sensing data showed that some forests grow on the territories of the municipal units. Nevertheless, none has attempted to register this resource and include it among community assets. This is mainly due to the limited capacity of municipal bodies in terms of environmental management, including forestry/natural resources management. Thus, another fact is that currently there are no municipal forests besides the parks and plantings in the settlements.

Recently the National Agency on the affairs of Local Self Governance has requested that SAEPF conduct forest inventory in those forests to legalize the resource. However, the problem arose of neither agency having adequate funds to take the inventory. A special letter to the Government with cost estimations for the inventory is now being prepared and debated.

In 2009, the Government of KR endorsed an Action Plan on Forest Law Enforcement and Governance that serves as an inter-agency and inter-sectoral platform for cooperation to fight illegal activities in the forest sector. For example, included in the bylaws of the Action Plan is minimization of corruptive opportunities. This Plan was developed to demonstrate Kyrgyzstan commitment to promoting the Europe and Northern Asia Forest Law Enforcement and Governance (ENA FLEG) initiative within the frames of the St. Petersburg Declaration signed by Kyrgyzstan in 2005. To strengthen involvement of the Local Self-Governments concerning sustainable forest management, SAEPF has signed a memorandum of cooperation with the National Agency on Local Self Governance in 2006, thus expressing its commitment to integrate SFM into local development strategies. In practice, it gave the opportunity to the Heads of communes to participate in the planning sessions of the forest management units and in the decision-making process of the forest resource use rights distribution. In addition, Directors of the *Leshozes* must report on the activities and plans during debate sessions of the village councils.

## **B. Forest legislation**

The most significant pieces of legislation of the Kyrgyz Republic relating to forests and forestry include the following:

1. The Forest Code of the KR of 8 July 1999 regulates forest practices in the Kyrgyz Republic. It is directed towards (a) creating conditions for the rational use, reproduction, guarding and protection of forests and (b) increasing the environmental and resource capacity of forest.
2. The Land Code of the KR of 2 June 1999 regulates land use practices in the country.
3. The Water Code of the KR of 12 January 2005 regulates water management practices.
4. The law "On Fauna" of the KR of 17 June 1999 regulates the protection, use and reproduction of fauna.
5. The law "On Environmental Protection" of the KR of 16 June 1999 defines the policy for and regulates nature management and environmental protection.
6. The law "On Specially Protected Nature Areas" of the KR of 28 May 1994 regulates the organization, guarding and use of protected areas in order to (a) conserve unique natural areas and objects, remarkable natural formations and the genetic pool of fauna and flora; to (b) study natural processes in the biosphere; and to (c) control the changes in its conditions.
7. The law "On Ecological Expertise" of the KR of 16 June 1999 concerns legalities involved in environmental expertise aimed at enforcing the constitutional right of citizens to have a favourable environment by preventing negative environmental consequences arising from economic or other activities.

8. Resolution # 377 of the Government of the Kyrgyz Republic of 27 July 2001 approved regulations on Collaborative Forest Management in the Kyrgyz Republic.
9. Resolution # 482 of the Government of the Kyrgyz Republic of 19 October 2007 approved Regulations on the Procedure of Providing Forest Plots for Leasing and Use.
10. Decree # 506 of the President of KR on 23 November 2007 approved The Concept of Ecological Security of the Kyrgyz Republic, which places environmental protection among the top priority development guidelines.

## C. Main stakeholders of the sector

### 1. Governmental entities involved in forest governance

The State and Municipal (local) Governments, which are duly vested with the authority to govern the national forest resources, include the following individuals and entities:

- The President of the Kyrgyz Republic
- The *Jogorku Kenesh* (Parliament) of the Kyrgyz Republic
- The Government of the Kyrgyz Republic
- The State Agency for Environment Protection and Forestry under the Government of the Kyrgyz Republic
- The local state administrations and the bodies of local self-governance

The functions of the aforementioned regarding management of the national forest fund and ensuring the safety of forests are assigned as follows:

The President of the Kyrgyz Republic is responsible *inter alia* for:

- Leadership in foreign policy of the Kyrgyz Republic, carrying out negotiations and signing international treaties of the Kyrgyz Republic
- The submission of draft laws to the Parliament of the Kyrgyz Republic
- The signing of laws of the Kyrgyz Republic
- The appointment of the political staff of the public service system (including ministers, agency and committee' directors, and their deputies)

The following is under the jurisdiction of the Jogorku Kenesh (Parliament) of the Kyrgyz Republic:

- The adoption of the Laws of the Kyrgyz Republic (including those regulating the forestry sector).
- The ratification and denunciation of international treaties (including those concerning ecology and forestry).
- The approval of the national budget and the report on the implementation thereof (including the budget and the estimates of the State Agency for Environment Protection and Forestry).
- The approval, upon presentation by the Prime Minister of the Kyrgyz Republic, of the structure of the Government of the Kyrgyz Republic (including the status of the state forest management body).
- The approval of the national programmes for social and economic development, submitted by the Government of the Kyrgyz Republic (including the national programmes which contain a forestry component).

The following is under the jurisdiction of the Government of the Kyrgyz Republic:

- The development of the national budget, the submission of the budget to the Parliament of the Kyrgyz Republic and the ensuring of the implementation thereof (to finance inter alia forestry sector activities).
- State-owned property management.

- Leadership of activities of the ministries, state committees, administrative agencies and the bodies of the local state administration.
- The establishment of new forest management units, protected nature territories, reserves and the set-up of both these areas and the buffer zones.
- The adoption of by-laws for the purpose of enforcement of relevant laws.

The State Agency for Environment Protection and Forestry under the Government of the Kyrgyz Republic (SAEPF) is inter alia responsible for:

- Developing and implementing the state policy with regard to environment protection; conservation of biodiversity; management and sustainable use of natural resources; and development of mountain areas, forests and wildlife.
- Organizing the development of normative legal acts relating to protection of the environment; conservation of biodiversity; sustainable use of natural resources; and development of mountain areas, forests and wildlife.
- Establishing the rules, specifications and norms for the use of the country's flora and fauna, including forests.
- Developing strategies concerning forestry, hunting and fishing facilities and developing recreational activities related to the use of natural sites.
- Keeping and maintaining relevant records in the Red Data Book of the Kyrgyz Republic in accordance with the established procedure.
- Organizing the activities of specially protected nature territories, managing the nature reserves and conservation areas, writing proposals for development of a national network of specially protected nature territories and natural objects, and submitting these to the Government of the Kyrgyz Republic in accordance with the established procedure.
- Forging inter-governmental agreements with foreign countries, on behalf of the Government of the Kyrgyz Republic, on issues relating to solutions of ecological and environmental problems.
- Monitoring of the status of the environment, biological diversity, animal and plant life, and forest and mountain ecosystems.
- Managing, jointly with other interested ministries and agencies, the fulfilment of the obligations of the Kyrgyz Republic with regard to the multilateral environmental agreements, projects and programmes implemented with the support (financial and technical) of donors and international organizations.
- Implementing, jointly with the concerned ministries and administrative agencies, the development of economic mechanisms for the use of natural resources, the conservation of biodiversity, the rational use of natural resources, the development of mountainous areas, and the protection and use of the country's animal and plant life, including forests.
- Organizing forest (and game) inventory and management planning, and ensuring the development of a set of measures aimed at (a) forest safeguarding and protection, (b) the reproduction and rational use of forests, and (c) the improvement of the forest management standards.
- Implementing forest management activities, including record-keeping of the forest fund, guarding and protecting the forest (e.g., against illegal harvesting), controlling use and reproduction of forest resources, endeavouring to protect forests from pests and diseases as well as from other actions causing damage to the forested areas.

As of 2009, there were 91 independent legal entities within the system of the State Agency for Environment Protection and Forestry under the Government of the Kyrgyz Republic, (see general organigram in [annex 6](#)):

- Head Office of SAEPF
- 7 Territorial environmental protection and forestry departments, including Chui-Bishkek, Talas, Jalal-Abad, Osh, Batken, Issyk-Kul and Naryn
- 42 *Leshozes* (forest management units)

- Department of Supervision and Regulation of Hunting
- 9 Independent Forest Ranges
- State Nursery
- 9 National Parks
- 10 Nature Reserves
- Pest Control Station
- Department of Monitoring, Forest and Game Inventory, and Management Planning
- Republic Fund for Nature Protection and Forestry Development
- 7 local fund branches for the protection of the environment and development of forestry
- Issyk-Kul Biosphere Reserve
- Issues of local importance are resolved by the local self-governance bodies, including village and town councils and mayoral offices

The mandated activities of their elected bodies, i.e., local parliaments include:

- Developing and implementing the programmes and activities aimed at social protection, as well as providing economic, household, social and cultural services to the population.
- Controlling the use of natural resources.

The mandated activities of the municipal executive bodies include *inter alia*:

- Managing the municipal property and financial resources of a local community.
- Holding tenders for the legal entities and individuals that are willing to lease a plot of land.
- Controlling the water supply to the settlements.
- Controlling the distribution and rational use of the irrigation water.
- Controlling activities carried out by enterprises, organizations, institutions and other economic entities, relating to the implementation of environmental legislation, use of land and natural resources, meeting of the sanitary norms and rules, and implementation of ecological activities.

In case of absence in the settlements of local-level branches of state bodies, Local Self-Governments are delegated *inter alia* the authority to:

- Develop and implement programmes for employment and migration of population.
- Identify people in need of support/protection, and organize specific social protections for them.
- Ensure the rule of law and public order in the area.
- Distribute and use lands of the Fund for redistribution of arable lands.
- Review and synthesize data for long-term development of agricultural production.
- Prepare economic forecasts on the production of agricultural products.
- Respond appropriately to prevent the grazing of agricultural crops by cattle, to guard crops and to protect forest strips and forest stands.
- Develop and implement environment protection activities.
- Collect taxes, fees and duties.

## 2. Forest users and other stakeholders

### *Forest estate tenants*

The system of leasing individual plots of the State Forest Fund was established in 1997. Since 1998, a new participatory approach of Collaborative Forest Management (CFM) has been introduced in the Swiss forestry support project KIRFOR to ensure more sustainable forest management. In 2001, the system was legalized in the form of CFM Regulations approved by the Government. This is a new type of leasing system in which the leasing of forest plots is mutually beneficial. The state grants to the tenants the right to use the forest-related benefits provided that they observe all the rules for forest use. In return for this right, the tenants guard the forest plots

against illegal activities (cuttings) and implement all the necessary silvicultural activities which are important for reproduction of forest resources (seeds collecting, establishment of forest nurseries for growing seedlings and saplings, planting of new trees, control of forest pests and diseases, etc.).

#### *Private sector*

Due to the importance of the protection function of forests, and to the small areas of available production forests, industrial timber harvesting is limited in Kyrgyzstan. The furniture factories in operation in Kyrgyzstan use raw material imported from Russia.

The annual volume of timber harvested by the *Leshozes* does not exceed 30,000 m<sup>3</sup>. The harvested timber is processed by the small processing enterprises in a traditional way. It is apparent that the volume of harvested timber fails to meet the existing demand in the country.

In 2003, the Association of Forest Products Processing Enterprises of KR (AFPPE) was established and now includes more than 50 forest operators, lessees and processing units. Community based tourism promoted all over the country also has an association of service-providers (CBO tour-operators). Medicinal plant collectors and processors are united under the Phyto-Pharm Association.

#### *Local population*

In Kyrgyzstan, where over 60 per cent of the population lives in rural areas, human pressure is one of the major negative impacts on forests. New agrarian policy has resulted in an increase in the number of livestock, which grazes around the villages and frequently in the forests.

In Soviet times, Kyrgyzstan was one of main suppliers of mutton to the USSR market. The flock of more than ten million sheep was grazing in the mountains within the developed system of spring, summers and winter pastures. After dissolution of the Soviet Union and privatization of the livestock of soviet-style agro-cooperatives (*kolkhozes*), the number of sheep was reduced to two to three million. According to data provided by the Department of Pastures, the present flock of sheep now numbers about five million. The problem appears to be a complex one. Instead of big sheep-breeding *kolkhozes*, which could organize transport of livestock to different pastures, numerous private farmers and villagers want to graze the livestock near the settlements.

The problem of pasture depletion and degradation has thus surfaced again. In the past, overly large flocks caused this problem; now the cause is two-fold: (a) the lack of grazing organization with fixed routes to summer pastures and (b) pasture turnover according to grass vegetation defined by elevation and other conditions. It is a challenging issue for Local Self-Governments, which are still adapting to a new and rapidly changing political context.

It should be mentioned that one third of the State-managed forest lands comprise pastures; thus, the problem of grazing organization is one of the most important, since many herders tend to diminish the number of livestock heads when getting permits to cross forest borders. Foresters do not have the direct right to charge forest law violators with crimes, so their main partner is Local Self-Governance Bodies, which hold an informal power to influence local residents.

Today the majority of local populations cannot afford to purchase electricity or coal for heating and cooking, and the collection of firewood is in many cases the only real option. According to SAEPF, local populations consume around 300,000 m<sup>3</sup> of fuel wood annually.<sup>25</sup>

#### *Non-governmental organizations*

The number of the non-governmental organizations in Kyrgyzstan exceeds 11,000, many of which have been established for the purpose of environment protection. There is no statistical data on the number of non-governmental organizations engaged in forest-related activities directly. Only

---

<sup>25</sup> SAEPF, Intercooperation Kyrgyzstan (2007), *60 years to Forestry of Kyrgyzstan*, Bishkek, p.30.



some of the NGOs located in the capital are commonly known: Independent Ecological Expertise, BIOM, Ecological Movement Aleine, and Tabiyat. They pay a great deal of attention to environmental consequences of economic undertakings and illegal activities related to natural resource use.

However, recently several new NGOs have operated directly in the forest sector, such as the Lesic-South Public Association (Jalal-Abad), the Forest Protection Public Foundation (Bishkek), and the Eco-Guide Public Association (Bishkek). In the beginning of 2010, a new national Association of Forest Users of the Kyrgyz Republic was established to protect the rights of forest users and to voice their interests to national authorities.

The influence of the civil society organizations is growing and some of them now have more expertise and capacity than governmental forestry bodies. This makes them potential contributors to the steering of forest sector reform towards SFM.

#### *Forest Research and Education*

The Institute for Forest Research of the National Academy of Sciences of the Kyrgyz Republic is the main forest science institution engaged in forest research at the field level. It is responsible for implementation of both theoretical and applied research on issues of forest monitoring, pest control, silviculture methods, and establishment of plantation, seedling and sapling growing techniques.

Several universities train forest engineers: 1) the Silviculture Chair at the Kyrgyz Agrarian University; 2) the Forestry Chair of the Issyk-Kul State University; 3) Jalal-Abad State University; and 4) Osh Technological University. Two vocational schools (# 20 in Bishkek and # 67 in Gulcha) are training mid-level forestry specialists (forest wardens).

#### **D. Climate change policy**

The issue of climate change is addressed in the following legal documents providing a regulatory framework for the country:

- Law of the KR of 14 January 2000 # 11 entitled “On the Kyrgyz Republic joining the UN framework convention on climate change and UN EEC on large distance trans-boundary air pollution”
- Law of the KR of 25 May 2007 # 71 entitled “On the state regulation and policy in the domain of emission and absorption of greenhouse gases”
- Law of the KR of 15 January 2003 # 9 entitled “On the ratification of Kyoto protocol to the United Nations Framework Convention on Climate Change”
- Presidential Decree of 18 July 2005 UP # 281 entitled “On the establishment of the national committee on climate change consequences”
- The second national report on the United Nations Framework Convention on Climate Change approved by the Government of KR Resolution as of 6 May 2009 # 274.

With the support of the United Nations Development Programme, the SAEPP is currently guiding the development of the National Action Plan on Adaptation to Climate Change (NAPACC).

Presently the only financial allocation to forests and climate change issues is grant support from one component of the GEF/IFAD/WB project entitled “Development of Tien-Shan ecosystems” implemented in Kyrgyzstan. Its **Forestry and greenhouse gases quotas trade in the Kyrgyz Republic** component will contribute to reforestation 13,950 ha (6,280 ha on rural municipal lands and 7,670 ha in SFF) to (a) mitigate climate change by sequestering greenhouse gases into forests; (b) develop a greenhouse gas quotas trading scheme so that the country will be paid for the carbon it has sequestered; (c) recreate habitat for biodiversity; (d) contribute to poverty reduction by generating local benefits such as fuel and construction wood, fruit, nuts, fodder; by improving access to non-timber forest products for the poor; and by creating new jobs; (e)

improve the ecological situation by generating environmental benefits from windbreak strips to reduce soil erosion; and (f) to rehabilitate the agricultural lands reducing water logging. A summary of the estimated CO<sub>2</sub> sequestration and costs is presented in Table 12.

Initial estimates show that reforesting the planned area of about 18,000 ha should sequester around 980,000 tons of CO<sub>2</sub> by 2017 which, when adjusted for baseline sequestration and leakage risk, result in some 784,000 tons CO<sub>2</sub> of Certified Emission Reduction (CER). The BioCarbon Fund could purchase some 600,000 tons of CO<sub>2</sub>. However, revised estimates based on more detailed carbon sequestration calculations have shown that 251,000 t of CER can be sold to the Carbon Fund by 2014 at the price of USD 4.25 per ton. The whole deal is under negotiation at the moment.

**Table 12 Estimated CO<sub>2</sub> sequestration and costs of reforestation**

<i>Species</i>	<i>Total area reforested</i>	<i>Average CO<sub>2</sub> sequestration rate</i>	<i>10 years gross carbon sequestration</i>	<i>10 years CER</i>
	<i>hectare</i>	<i>ton/ha/yr</i>	<i>CO<sub>2</sub> t</i>	<i>gross - 10% baseline - 10% leakage</i>
Poplar	14 200	11,0	1 023 660	818 928
Spruce	8 000	6,1	322 080	257 664
Saxaul	3 300	5,6	121 968	97 574
Elm	3 000	7,6	170 280	136 224
Juniper	2 500	1,5	24 750	19 800
Diverse fruit	1 500	3,6	35 640	28 512
Walnut	1 100	8,2	59 532	47 626
Willow	1 000	14,5	95 700	76 560
Pine	800	13,5	71 280	57 024
Others	700	7,6	35 110	28 088
<b>Total/Average</b>	<b>36 100</b>	<b>8,7</b>	<b>1 960 000</b>	<b>1 568 000</b>
<i>Species</i>	<i>Reforested</i>	<i>Cost</i>	<i>Total cost</i>	
	<i>hectare</i>	<i>US dollars per hectare</i>	<i>thousand US dollar</i>	
Poplar	14 200	708	10 060	
Spruce	8 000	639	5 116	
Saxaul	3 300	662	2 186	
Elm	3 000	653	1 960	
Juniper	2 500	616	1 541	
Diverse fruit	1 500	750	1 125	
Walnut	1 100	722	795	
Willow	1 000	653	653	
Pine	800	653	523	
Others	700	673	471	
<b>Total/Average</b>	<b>36 100</b>	<b>677</b>	<b>24 430</b>	

*CER, Certified Emission Reduction*

#### **E. Inter-sectoral cooperation**

The National Action Plan on Forestry Sector Development, endorsed by the Governmental Resolution in 2006, paved the way to cooperation of all the stakeholders inside and outside the sector. NAP directly identifies the partners to implement the forest sector development activities. After its endorsement, inter-institutional, inter-sectoral cooperation promoting sustainable forest



management received a legal basis with clearly defined objectives, results, activities and allocated funds. However, no other state ministries or agencies have separate special budgets, and their financial contribution to these activities is not clearly defined.

The lack of coordination in financial provisions of the forest policy implementation is likely to hamper the progress of the development plans.

Nevertheless, in 2006, SAEPF signed a Memorandum of cooperation with the National Agency of the Affairs of Local Self-Governance, trying to build a partnership and to get support from local communities in the transition to sustainable forest management. This was in response to the growing pressure of local populations on forests and an attempt to involve national institutions dealing with Local Self-Governments in searching for a balance between conservation and use of forest resources.

The body of legislation on nature protection stipulated the cooperation of law enforcement agencies and services with the State Agency on Environment Protection and Forestry. Thus, in 2006, SAEPF, the Office of the Prosecutor General, the National Security Service, the Ministry of Internal Affairs and the Customs Inspection jointly signed "Directions for Cooperation" to facilitate prosecution of environmental law violators.

To continue this cooperation in 2009, the Government of Kyrgyzstan endorsed the Plan and Measures for Forest Law Enforcement and Governance, which mobilized law enforcement bodies and forest governance bodies to fight against forest law violations.

In the case of the Ministry of Agriculture, no forestry-related measures are included in their plans, budgets and annual reports of activities, though farmers usually do some tree planting for establishing windshields along the channels and around fields.

According to the legislation, pastures and forests are the property of the state, as well as a portion of arable lands managed by Local Self-Governments. In fact, all these resources are leased to the population.

In the late nineties, the majority of arable lands were privatized during agrarian reform. In actuality, only private farmers plant fast growing (willow and poplar) or fruit species (apple, apricot, cherry) in their gardens, around or alongside of their fields, or along irrigation channels in order to use the timber and fruit afterwards. To do this, they purchase saplings from the nurseries of the local state forest management units. This is one of the most stable sources of income generation for the majority of the state forest management units.

Another portion of state-owned arable land is under the responsibility of the Ministry of Agriculture, but the Ministry delegates operational management of that resource to Local Self-Governments. The latter in turn leases those lands to local people, but the tenants do not want to invest additional funds in tree planting on the state lands. New approaches and incentives should be found to make tree planting profitable and widespread. This is an area for cooperation of the three national actors: the National Agency on the affairs of Local Self-Governments, the Ministry of Agriculture and the State Agency on Environment Protection and Forestry.

The Ministry of Transport and Communications, which is responsible through its local branches for tree plantations along the roads, reports neither activities nor investments in this area. Since the general road network was inherited from the Soviet Union, the national highways still have relatively satisfactory road protection tree medians (however, in many places, the local residents have chopped down these trees for fuel). In addition, new road construction currently underway in many places anticipates tree planting alongside the roads in the near future. The problem lies not in the planting of trees, but in ensuring their survival within the first several years. The Ministry of Transport is ready to allocate funds for saplings (potential income for *Leshozes*) and plantations (*Leshoz*/Local Self-Governments), but it is not prepared to ensure proper maintenance of

plantations. Evidently it needs to provide additional funds to pay the appropriate local government to guard and maintain the new plantations. For this, well-founded cost estimates should be submitted to the Ministry of Finance to be included into the yearly State Budget. This is an area for cooperation of the three national actors: the Ministry of Transport and Communications, the National Agency on the affairs of Local Self-Governments and the State Agency on Environment Protection and Forestry.

The State Committee of Water Resources Management of the Ministry of Natural Resources is planting trees to establish water protection zones along the channels. However, these expenses are labelled as “the establishment of the protection zone facilities”.

The situation of the water area protection zones is the same as that of the roads strip plantation. Corresponding budget allocations should be made to make these planting projects feasible. Once again, the role of local communities and the Local Government is important. In general, this is again an issue for cooperation of the three national actors: the State Committee of Water Resources Management, the National Agency on the affairs of Local Self-Governments and the State Agency on Environment Protection and Forestry.

The Ministry of Education is in charge of training new staff for the sector, but since the need for forestry specialists is small, the higher educational institutions only have chairs of forestry or silviculture, which are usually under ecology departments. There is no separate department as far as forest sector education is concerned. This joining of ecology and forestry into one faculty is a common trend in higher education. However, to trace real financial flows, separate accountancy gives more precise and reliable information.

The interaction of the state forest sector as future employer and educational institutions as training centres is based on the inter-institutional cooperation experience of the Soviet Higher Educational School. Forest specialists deliver special lectures and offer seminars for the students, they compose final examinations together with professors, and of most importance, they organize practical training for the students in the field units.

As an example of educational funding for forest engineers, the data from the Kyrgyz National Agricultural University (KNAU) in Bishkek is presented in Table 13.

**Table 13 Budget allocations and special means of the KNAU**

	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Total</b>
<i>State budget funds allocated by the State (in thousand KGS)</i>					
Salaries	99.1	137.3	235.6	112.3	<b>584.3</b>
Social Fund dues	20.8	28.2	44.8	20.4	<b>114.2</b>
<i>Funds earned from commercial education contracts</i>					
Salaries	132.0	214.4	278.2	405.8	<b>1 030.4</b>
Social Fund dues	27.7	43.2	52.9	77.6	<b>201.4</b>
<b>Subtotal, thousand KGS</b>	<b>279.6</b>	<b>423.1</b>	<b>611.5</b>	<b>616.1</b>	<b>1930.3</b>
<b>Subtotal, thousand US dollars</b>	<b>6.96</b>	<b>11.34</b>	<b>16.72</b>	<b>14.36</b>	<b>45.0</b>
Exchange 1\$ =	40.16	37.31	36.57	42.89	

The Institute for Forest Research of the National Academy of Sciences provides a scientific basis for sustainable forest management in Kyrgyzstan. Several other institutions of the National Academy of Sciences also conduct research on forest ecosystems. These include the Biology and Soils Institute, the Institute of the Biosphere, and the Botanical Garden. Table 14 presents the state budget allocations and Table 15 special means and expenditures of the Forest Research Institute in 2008.

**Table 14 Financing of SFM research in 2008**

<b>No</b>	<b>State budget allocations</b>	<b>KGS</b>	<b>USD</b>
1	Wages	2 578 000	70 494.94
2	Social fund dues	481 600	13 169.26
3	Communal services: water, electricity, gas	204 100	5 581.07
4	Purchase of consumables and other material	30 000	820.34
5	Field trips inside the country	16 000	437.51
<b>Total</b>		<b>3 309 700</b>	<b>90 503.14</b>

**Table 15 Special means**

<b>No</b>	<b>Revenue</b>				<b>Expenditures</b>				<b>Total</b>
	<b>Incom e type</b>	<b>Source</b>	<b>Sum</b>	<b>10% to Researc h Fund</b>	<b>20% tax on revenue s</b>	<b>Field trips</b>	<b>Commu -nal service s</b>	<b>Other</b>	
1	10% dues	Forest Nursery Station	149 000	5 000	20 000	65 300			<b>90 300</b>
2	Grants	Swiss Forestry project	54 000				54 000		<b>54 000</b>
3	Spons orship	Republican Fund for Nature Protection and Forestry Development Arboretum	358 550					358 550	<b>358 550</b>
4			25 200				25 200		<b>25 200</b>
<b>Total, in thousands of KGS</b>			<b>586 750</b>	<b>5 000</b>	<b>20 000</b>	<b>65 300</b>	<b>79 200</b>	<b>358 550</b>	<b>528 050</b>
<b>Total, in thousands of USD</b>			<b>16 044.57</b>	<b>136.72</b>	<b>546.89</b>	<b>1 785.6 1</b>	<b>2 165.70</b>	<b>9 804.48</b>	<b>14 439.4 3</b>

Like other institutions funded from the state budget, the Institute for Forest Research suffers from a financing shortfall, and has to earn money by selling saplings and seedlings from its nursery and Arboretum and by providing different services.

Monies allocated from the State Budget for specific budget items are subject to year-end auditing for proper usage by the responsible fiscal bodies (the Accounting Chamber, Financial Inspection, etc.). An institution requires special means – self-earned funds -- to bridge the gap in the financing of administrative, operational and other costs. The state provides and regulates this additional means of finance, imposing an obligatory procedure of cost estimation and endorsement through the Ministry of Finance.

#### IV. Financial flows for SFM

To understand clearly the general dynamic of state budget funding of the forest sector, it should be mentioned that the status of forestry has changed several times since 1991:

- 1991 - 1992 – Forestry Committee under the Cabinet of Ministers of KR
- 1992 - 1994 – State Forest Inspection under the Government of KR
- 1994 - 1996 – Forestry Department of the State Committee of KR on Nature Protection
- 1996 – 2001 – State Forest Agency under the Government of KR
- 2001 – 2002 – Forestry Department of the Ministry of Ecology and Emergency Situation of KR
- 2002 – 2005 – State Forest Service of KR
- 2005 – 2009 – Department of Forest Ecosystems Development of the State Agency for Environment Protection and Forestry under the Government of KR

Any change in the Governmental structure is the prerogative of the President and the Parliament in accordance with the Constitution of the country. However, it is difficult to judge the winning argument that will cause a subsequent change in the statute of the state forest governance institution. These are always political decisions affected by a wide set of factors.

##### A. State budget allocations

The main financing of the forest sector comes from the state. This is determined by the existing organization of the state governance of natural resources, because the majority of forests belong to the state. The state budget allocates funds to the State Forestry Agency, meaning presently to the State Agency for Environment Protection and Forestry (SAEPF). These funds, making up 88 per cent of the allocated budget, mainly cover staff remuneration expenses and wages as well as dues to the Social Fund (the law requires employers to pay 17.25 per cent of the salary as dues to the Social Fund). The other 12 per cent covers trips, communal services, transport, and maintenance of infrastructure. The state budget allocations to the State Forest Agency/the State Agency for Environment Protection and Forestry (SAEPF) during the years 2001 - 2009 are shown in Table 16.

**Table 16 State budget allocation to State Forest Service (2001–2009)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Allocated budget funds, thousand KGS	13 565	23 817	25 055	25 267	26 607	57 894	69 148	81 439	130 152
Thousand USD	284.3	491.6	533.8	592.15	648.8	1 441.6	1 853	2 226.9	3 034.5
Exchange rate 1\$ = KGS <sup>26</sup>	47.72	48.45	46.94	42.67	41.01	40.16	37.31	36.57	42.89

##### B. Self-financing activities

It is clear that that state budget allocation is not sufficient for managing state forests and developing the forest sector properly. Therefore, additional funds are generated by the SAEPF itself. These additional funds are called “special means” funds, and they are considered part of the consolidated state budget allocated to the sector. The main types of special means generated

<sup>26</sup> Data of the National Statistic Committee of the Kyrgyz Republic

by forest governance units of different levels are (a) revenue from timber sales, (b) revenue from granting rights to collect harvesting residues, (c) income from leasing forest plots, (d) income from permits to collect NTFPs, and (e) penalties on illegal activities. This source funds all expenses related to the implementation of development plans on reforestation, maintenance of nurseries, establishment and maintenance of new plantations, and additional labour required for forest management. 5 per cent of special means income generated by forest management units accumulates in the Republic Nature Protection and Forestry Development Fund (see below for details). The special means income from 2004 to 2008 is presented in Table 17.

Sample data (2008-2009) on the finance and economic activity of the state forest management units is presented in annex 8.

**Table 17 Special means income (2001-2009)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Income, thousand som	31 373	40 056	35 548	43 487	50 725	57 583	62 228	62 752	68 680
Expenses, thousand som	20 229	29 210	39 806	40 609	42 758	53 001	64 618	60 676	73 640
Balance, thousand som	11 144	10 846	-4 258	2 878	7 967	4 582	-2 390	2 076	-4 960
Income, thousand USD	734.386	826.749	757.307	1 019.15	1 236.89	1 433.84	1 667.86	1 715.94	1 601.31
Expenses, thousand USD	423.910	602.889	848.018	951.699	1 042.62	1 319.75	1 731.92	1 659.17	1 716.95
Balance, thousand USD	233.529	233.859	-90.711	67.447	194.269	114.093	-64.057	56.767	-115.64
Exchange rate	47.72	48.45	46.94	42.67	41.01	40.16	37.31	36.57	42.89

### C. Kyrgyz Republic Fund for Nature Protection and Forestry Development

The Kyrgyz Republic Fund for Nature Protection and Forestry Development was established in 2006 by uniting two funds by Presidential Decree: the Republic Fund for Nature Protection and the Fund for Forestry Development. The Fund serves an important role today in financing SFM. It has local branches in all the provinces of Kyrgyzstan, and its operations are subject to special regulations.<sup>27</sup>

The funds of this financial instrument are derived from:

- Payments for permitted emissions, discharge of pollutants and dumping of waste
- Royalties for natural resources use
- Penalties levied to offset loss caused by damage on environment and natural resources due to violation of environmental legislation

<sup>27</sup> "Regulations on the Republic Fund for Nature Protection and Forestry Sector Development Funds Generation and Use", approved by Presidential Decree on 17 May 2006, # 263.

- 5 per cent of revenues from sales of products and services and other economic activities of the forestry units and national parks
- Income collected by ecological admitting posts
- Voluntary donations from nature users, sponsors and donors
- Other legal sources

According to the Regulations of the Fund, the use of funds should focus on:

- Construction, restoration, or refurbishment of nature protection facilities
- Implementation of research, studies, projects on development
- Introduction of new machinery, technologies, equipment and tools for monitoring and assessment of the environment, forestry and biodiversity conditions
- Development and implementation of national and local projects, including those on implementation of nature conservation conventions and international agreements aimed at improving the environment and assuring ecological security
- Provision of funds and subsidies to organizations and enterprises implementing modernization, reconstruction and reparation of the nature protection facilities
- Work on rehabilitation of nature facilities damaged by economic activities
- Support to organizations for development of protected territories and conservation of nature relics
- Development of nature conservation legislation and improvement of economic mechanism of nature exploitation.
- Support for the development of an environment and natural resource monitoring system
- Expansion of national reports on the condition of the environment and other ecological information
- Ecological education, organization of seminars, workshops and competitions on the environment, biodiversity and forest conservation
- Infrastructure maintenance and other expenditures of the Republican Fund and its branches
- Support to enterprises of the forest management units and to natural parks, reserves and their equipment
- Environment protection staff education and retraining
- Republican Fund running costs
- Inter-governmental environment protection activities 5 per cent of funds can be used as reimbursement to salaries of personnel
- Incentives to promote nature protection and sustainable, careful and safe nature exploitation

Income and expenditures of the Republic Fund for Nature Protection and Forestry Development from 2005 to 2009 are presented in Table 18; see also [www.nature.kg](http://www.nature.kg).

**Table 18 Income and expenditures of the Fund (2005-2009)**

	<i>Income</i>				
	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Local branches	19 341.90	22 108.70	31 347.50	41 304.90	48 546.20
Republic Fund	5 555.30	19 773.90	27 102.00	32 976.10	38 132.30
<b>Total income, thousand KGS</b>	<b>24 897.20</b>	<b>41 882.60</b>	<b>58 449.50</b>	<b>74 281.00</b>	<b>86 678.50</b>
<b>Total income, thousand USD</b>	<b>607.10</b>	<b>1 042.89</b>	<b>1 556.59</b>	<b>2 031.20</b>	<b>2 020.94</b>
Exchange rate 1 USD=	41.01	40.16	37.31	36.57	42.89
	<i>Expenditures</i>				
	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Local branches	19 341.90	22 250.30	30 887.10	40 290.80	46 659.60
Republican Fund	5 555.30	13 961.40	26 475.60	25 540.00	40 554.40
Funding of nature protection activities	10 867.70	19 525.60	36 204.60	47 941.20	69 290.70
<b>Total expenditures(thousand KGS)</b>	<b>24 774.70</b>	<b>36 211.70</b>	<b>57 362.70</b>	<b>65 830.80</b>	<b>87 214.00</b>
<b>Total income, thousand USD</b>	<b>604.11</b>	<b>901.68</b>	<b>1 536.46</b>	<b>1 800.13</b>	<b>2 033.43</b>

In the last five years, the Fund's income has increased more than threefold, as have expenses for nature conservation activities and SFM. The main funded activities are presented in Table 19.



**Table 19 Main activities financed by the Fund during 2006–2009**

<i>No</i>	<i>Activity</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
<i>thousands of KGS</i>					
1.	Protection and rational use of water resources	5 189.9	1	10 119.6	9 806.4
2.	Production and consumer waste management	1 030.1	5 340	6 461.2	6 410.8
3.	Forestry sector development, plantations and landscape improvements	4 457.4	9362	11 335.8	17 303.4
4.	Flora and fauna protection	1 571.4	1 007.3	2 923.2	-
5.	Atmosphere air protection	400	-	1 200	5 593.1
6.	Conservation of biodiversity and mainstreaming of protected territories	2 444.6	3 986.1	4 625	21 252.4
7.	Monitoring of environment condition and capacity building of local environment protection bodies	1 972.2	3 688.7	7 298.3	4 013.5
8.	Information on environmental awareness, rational use of natural resources, ecological education, harmonization of legal and regulatory documents	2 437.8	3 068.2	3 138.3	2 359.3
9.	Capacity building for ecological expertise	-	-	424.4	2 399.6
10.	Research and studies	-	-	102.5	
11.	International cooperation, membership fees for ecological conventions	22.2	196.2	312.9	152.2
<b>Total</b>		<b>19 525.6</b>	<b>36 204.6</b>	<b>47 941.2</b>	<b>69 290.7</b>

Particular activity types financed by the Fund are directly related to sustainable forestry. The first one is from table 18, line 3: Funding of forestry sector development, plantations and landscape improvements. In 2009 for instance, KGS 17,303,400 were allocated for this, including:

- Plantations outside SFF territory
- Expansion of nurseries (25.56 ha, 45 species)
- Pest control (including hand collecting of gypsy moth eggs)
- Contribution to National Forest Inventory
- Fire extinguishing equipment
- Forest wardens' ammunition

From line 6, the Conservation of biodiversity and mainstreaming of protected territories, with an allocation of KGS 21,252,300 in 2009 included:

- Research activities in the state natural reserves and parks, wildlife inventory, ecological education activities, inventory, etc.;
- Conservation and regeneration activities (biotechnical activities, regulation of the number of dangerous animals, etc.), and support to the Game Resources Regulation Department.

#### **D. Private sector**

One may indeed call the private sector in Kyrgyz forestry “emerging”, since *Leshozes* at the moment unusually have both productive and regulating/control functions. Local private entrepreneurs, due to various legal and economic reasons, invest mainly in forest products processing. For instance, the timber processing sector includes a diverse set of producers representing everything from home handcrafting to medium-sized enterprises. According to Swiss studies, already in 2004 this sector employed around 45,000 people. The annual turnover of the

sector was soms 1,900,000,000 (USD 44,052,251), with added value of soms 575,000,000 (USD 13,331,602).<sup>28</sup>

Non-timber forest products are also processed by many private producers. One of the best known enterprises is Lesnoi Product, Ltd. (with the trademark of “Dary Lesa”), which specializes in processing forest fruit, mountain honey and medicinal herbs. Lesnoi Product cooperates with micro producers, ensuring standards; supplying producers with packing materials, labels and certificates; and marketing their products.

## E. International support

The international community provides considerable support to the forestry sector in Kyrgyzstan. This financial support has much contributed to the transition to sustainable forest management. Because of the generally difficult socio-economic conditions of Kyrgyzstan, external support since independence has been in the form of grants. Several international development and cooperation agencies have implemented or are currently implementing projects to develop the forest sector in Kyrgyzstan. Foreign financing figures for forest sector development in Kyrgyzstan from 2006 to 2009 are presented in Table 20.

**Table 20 Foreign financing to the forest sector development**

<i>Donors/projects</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
	<i>In US dollars</i>			
SDC/Kyrgyz-Swiss Forestry Support Programme KIRFOR (budget inside Kyrgyzstan)	779 800	717 500	1 004 000	676 000
ETHZ/Oreh-Les/Research of the walnut-fruit forests	21 400	21 000	25 200	19 000
NFG/Kyrgyz-Norway project “Environment and forest”	105 000	N/A	N/A	N/A
FAO/Capacity building for monitoring and assessment of the national forest resources	N/A	N/A	159 000	159 000
Euro Commission/Pamir-Alai trans-boundary protected territory	N/A	200 000	200 000	200 000
TIKA/Pest control in walnut-fruit forests	N/A	500 000	500 000	N/A
FAO/NFP Facility/Support to national forest programme	100 000	150 000	150 000	N/A
JICA/Support to Joint Forest Management	N/A	N/A	N/A	368 000
<b>Total</b>	<b>1 006 200</b>	<b>1 588 500</b>	<b>2 038 200</b>	<b>1 442 000</b>

Until recently, there were not many private foreign investors in the Kyrgyz forest sector. In 1994, Kyrgyzstan signed an agreement with the American company Jangak-Regia for a concession to harvest walnut timber, including burls; however, the agreement was shortly terminated due to evidently non-profitable terms for Kyrgyzstan. In 2005, also in the walnut-fruit forest belt, a Chinese investor built a factory to process wild apples and other fruit. However, it stopped in a year, due to the lack of a regular and sufficient fruit supply, which prevented the factory from working year round and reduced its activities to seasonal ones. The supply shortage occurred due to the proposed purchase price for apples, which was too low even for Kyrgyzstan. In 2006, in Jalal-Abad, a businesswoman from the UK opened a parquet flooring workshop. But its activities

<sup>28</sup> Bern University of Applied Sciences, School for Architecture, Civil and Wood Engineering HSB (2004), *Value Added Chain Timber Industry – Kyrgyz Republic*, Biel.

too were stopped, this time by the law banning walnut felling. Because all these ventures are no longer operational, financial data on them is unavailable.

The main reasons for all those business failures are poor feasibility studies regarding sound economic calculations and the political and legal contexts of the operations in the forest sector. Another reason is evidently the low capacity of the local forest governance officials who consulted on the development of the business plans.

DRAFT

## V. Demand for financing for SFM

The main document defining activities and respective financing needs for forest sector development in general and for SFM in particular is the National Action Plan for Development of Forestry for the period covering 2006 to 2010. It states seven development objectives and a number of activities needed to achieve the declared objectives. Each objective and activity has a planned budget and a source of finance. At the time of NAP development in 2005, there were several international projects in Kyrgyzstan implementing development activities in the forest sector, and the NAP budget accounts for this (Table 21).

**Table 21 NAP 2006-2010 budget**

No	NAP objective	Sources of funding, thousand KGS				Total
		State budget	Own income	Donors	Gap	
1	Ensuring the conservation of biological diversity and forests	291 626.45	198 610.44	250 786.00	248 736.00	989 758.89
2	Improving the system of forest management	3 060.00	0	36 276.00	36 150.00	75 486.00
3	Involving local populations and communities in joint forest management	1 530.00	0	0	0	1 530.00
4	Determining norms for the sustainable management and the multi-purpose use of forests	6 197.42	29 330.16	73 216.15	45 549.95	154 293.68
5	Ensuring the efficiency of the economic reform and the system of financing of the forest sector	1 169.03	3 056.00	45 360.05	45 360.05	94 945.13
6	Improving forest-related science and education	1 530.00	1 560.00	10 045.00	10 045.00	23 180.00
7	Enhancing awareness of forestry sector development	2 295.00	5 700.30	3 341.50	1 701.50	13 038.30
<b>Total, in thousand KGS</b>		<b>307 407.90</b>	<b>238 256.90</b>	<b>419 024.70</b>	<b>387 542.50</b>	<b>1 352 232.00</b>
<b>Total, in thousand USD (for 2005 1\$=41.01)</b>		<b>7 485.92</b>	<b>5 809.72</b>	<b>10 217.62</b>	<b>9 449.95</b>	<b>32 973.22</b>

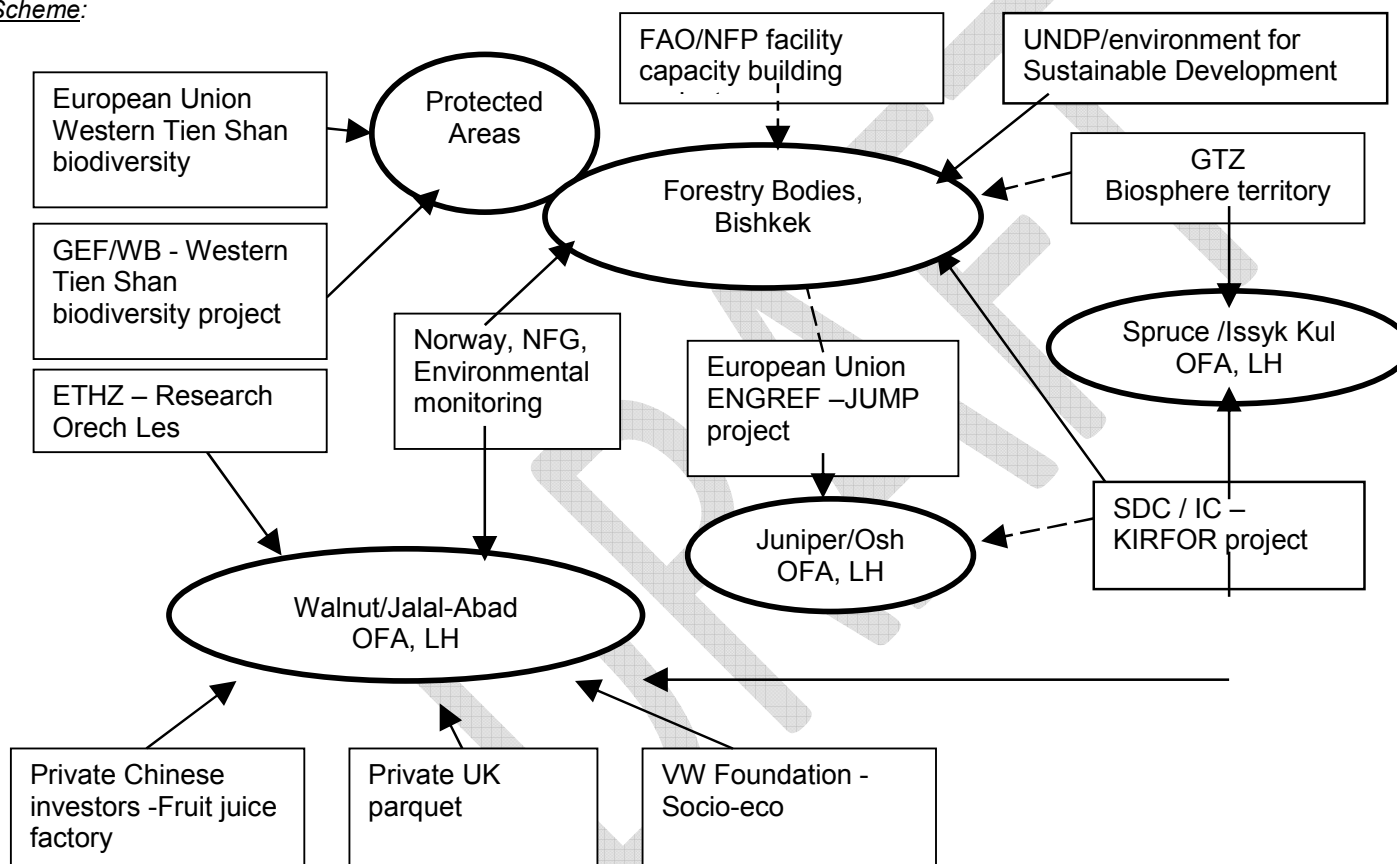
The total amount of the financing needs for the five-year period was estimated to be KGS 1 352 232 000 or USD 31 609 493.4. It was planned that KGS 307 407 900 (USD 7 185 903) would be allocated from the state budget. An additional amount of KGS 238 256 900 (USD 5 569 444) was estimated to be covered by income generated by the state forestry units. Furthermore, a contribution of KGS 419 024 700 (USD 9 795 034) was expected from the donors or foreign investors active at that time in the country. In 2006, these were the Swiss Agency for Development and Cooperation SDC, GTZ, GEF/WB, the EU, FAO, UNDP, Norwegian Forest Group, and Private Chinese investors.

In the same period, several other international development agencies displayed interest in the Kyrgyz forest sector: TIKa, JICA, SIDA, and USAID. Of those, TIKa and JICA have launched forestry support projects later (see Table 18 above and Figure 2).

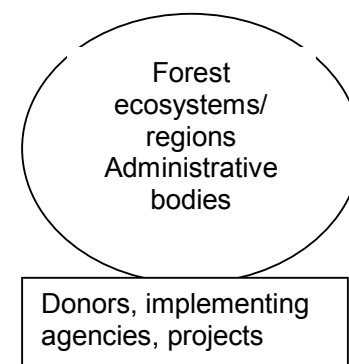
DRAFT

**Figure 2 Donors at the time of forestry NAP development in 2005-2006: Support related to forest ecosystems**

Scheme:



Legend:



—> Strong support  
--> Indirect support



## VI. Financing gaps and key challenges

Already in the planning stage of the National Action Plan 2006-2010, it was clear that the available funds were not sufficient to implement forest management in a sustainable way. However, the planners decided to include the financing gap in the NAP to draw the attention of potential donors. The finance deficit was estimated to be KGS 387,542,500 or USD 9,449,950 (see Table 21).

In the beginning of 2010, it was already apparent that more than half of the planned activities of the NAP 2006-2010 had not been implemented<sup>29</sup>. The main reasons for relatively poor performance identified in an independent midterm evaluation include: (a) frequent rotation of the staff, (b) generally low implementation capacity, (c) lack of clear vision on reform towards SFM in the SAEPF, (d) weak monitoring and coordination of NAP implementation, and (e) lack of consultative support during implementation.

The 9 million USD funding gap could be used as an excuse for failure in delivering the planned objectives of NAP. However, this would require additional analytical efforts to see the actual expenses for reaching NAP objectives and implemented activities as well as the barriers to reaching the goals. Due to the present situation of one more change of leadership in the agency, the need to create a new development plan for the next years, and the restricted capacities of the agency, this additional analysis can hardly be expected.

There has been no official report on the NAP implementation outputs yet, so there is no data basis to even begin such an analysis.

### A. Key challenges of forest finance

1. There are insufficient state budget allocations to achieving the planned objectives of the Forestry NAP. It was expected in 2005 that in the following five years, the system of forest governance would reform towards an increase of self-finance opportunities alongside a simultaneous increase of the state budget allocations.
2. There are restricted income-generation opportunities of the forest management units, due to the prevailing conservative approach to productive aspects of SFM.
3. Very limited opportunities are available to motivate the staff. The average wages of the forest wardens vary from 800 to 1500 KGS (19-35 USD), which is far from the average minimum subsistence level (in 2009 3,263.2 KGS or 76.2 USD). State enterprise forest management units do not have opportunity to increase wages because altering the forestry tariff grid is in the domain of the national fiscal bodies. Evidently, this encourages corruptive trends in all parts of the forest management cycle.
4. A general state strategy for fiscal sustainability of forest governance in Kyrgyzstan is lacking.
5. A methodology for calculating payments for the use of forest resources, including parks and plantations in the settlements, is lacking.
6. Modern funding mechanisms and tools promoting SFM are lacking. This is related to the lack of information and initiative to introduce modern payment schemes into forest management practice. In fact, the payment capacity of the population in Kyrgyzstan is rather low; thus, such opportunities can be oriented towards external markets of ESP (e.g., carbon trade, sustainable watershed management, SWAP, bio-prospecting, concessions). However, this presupposes complicated inter-state negotiations in the search for consensus.
7. The financial management system in the state forest management units is too complicated. All the expenditures covered by the funds generated from self-financed activities are to be endorsed by corresponding level of the state fiscal body. All the changes must be agreed upon,

<sup>29</sup> Public Foundation ECO-GUIDE, (2009). *Independent midterm evaluation of the Kyrgyz Forestry NAP 2006-2010*.

too. This increases dependency of the national-level forest management units in terms of operational activities implementation.

8. Cooperation between private entrepreneurs and the state management units is weak. Only limited opportunities for concessions and underdeveloped procedures of tendering, leasing, reporting, control, etc. in the forest sector exist. Since SFF forests are all state property, everything related to SFM can be subjected to a wide range of administrative barriers such as complicated permit processes or unwarranted inspections, often inspiring corruptive solutions (see section 6.3).

## **B. Conditions for private investment and an enabling environment for financing SFM**

The general framework for private investments in the Kyrgyz Republic appears conducive to investments. Nevertheless, there exists a gap between the legislation and the actual implementation of laws, and this concerns not only the forest sector. The “rule of law” is still a guiding principle, but not a daily practice in this country. The reason for this is quite evident: a set of laws exists, but lacks “implementation mechanisms” with clear tools and procedures. Even when certain implementation mechanisms become available, new ministers and state agency heads often try to “contribute” to improving the state of affairs through numerous amendments and addendums, misleading entrepreneurs and sometimes discouraging very promising initiatives. It needs to be mentioned that higher-ups still somewhat hesitate to hand over productive forest activities to the private sector in this country, because the environmental, protectionist trend is very popular, and because nobody asks the opinion of people actually living in the forested areas.

The following legal documents regulate private business activities in Kyrgyzstan:

- The Code of the Kyrgyz Republic on Administrative Responsibility, 4 August 1998, # 114
- The Law of the Kyrgyz Republic “On Licensing”, 3 March 1997, # 12
- The Law of the Kyrgyz Republic “On Protection of Entrepreneurs’ Rights”, 1 February 2001, # 15
- The Law of the Kyrgyz Republic “On the Free Economic Zones in the Kyrgyz Republic”, 22 March 2007, # 36
- The Resolution of the Government of the Kyrgyz Republic “On the Procedure of Control of Entrepreneurs and the list of the bodies authorized to implement it”, 6 November 2007, # 533
- The Resolution of the Government of the Kyrgyz Republic “On Implementation of Measures to Simplify State Regulation of Entrepreneurial Activities”, 31 December 2008, #752

The Country Development Strategy emphasizes the need to continue to favour a legal environment that attracts all kinds of investments. The newly amended Tax Code (2009) reduces the tax burden and improves tax administration in general. Equipment and machinery imported to Kyrgyzstan have been exempted from VAT. The tax on profit has been reduced from 20% to 10%. Several free economic zones with tax and duties exemption benefits have been established in the country. In order to improve investment climate and business environment, a special Investment Council was established under the President of the country. Its activities resulted in endorsement of the laws on procedures of control of business ventures, and the regulation of state administration influence on the private sector.

Several international financing institutions support Kyrgyzstan in developing better conditions for the private sector. The Asian Development Bank is providing support concerning policy and legalities in the development of a national programme on investment climate improvement. As another example, because of the World Bank project on the reduction of administrative barriers to run business, about 30 unnecessary administrative procedures were abolished.

The efforts of the Government to improve the business environment have resulted in the increase of foreign investments, which can be seen in Table 22.

**Table 22 Structure of the direct foreign investments<sup>30</sup>**

<i>Investment</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009<sup>31</sup></i>
<i>In million USD</i>						
Share capital	32.2	33.0	73.5	64.5	59.5	90.8
Financial leasing	0.7	-	-	7.5	7.6	-
Reinvested profit	48.8	30.7	21.1	33.6	152.9	35.9
Other capital	93.7	146.6	241.0	331.2	646.2	429.9
<b>Total</b>	<b>175.6</b>	<b>210.3</b>	<b>335.6</b>	<b>436.8</b>	<b>866.2</b>	<b>556.7</b>

Private entrepreneur access to credit has also improved. In 2008, there were 22 commercial banks in Kyrgyzstan, compared to 19 in 2006.

The Law of the Kyrgyz Republic “On the state-private partnership” (11 May 2009 # 154) clearly states the main principles of such partnerships:

- Legality
- Mutual benefit
- Effectiveness and transparency
- Voluntary participation
- Bona fide
- Fair, realistic liabilities
- Reciprocity in rights and obligations
- Equal access to participation in the state-private partnerships

Nevertheless, there are still several challenges as far as private business in the forest sector is concerned. First, due to its short history, the private sector is only now emerging in the forest sector, with little experience or knowledge. Relationships between the private sector and the state forestry service have yet to be developed. Despite the rather well-developed legal frame, no concrete steps have been taken yet to further develop the private-public businesses, due to uncertain political support for changes in the direction of decentralization. The only true success stories so far are the outcomes of internationally supported forestry development projects.

The Law on the State-Private Partnership and all other legal provisions need to be made more specific in terms of administrative procedures among the parties, particularly in terms of financial aspects, covering inter alia financial flows, tender procedures, documentation requirements, terms of reference, contract management rules, information flow requirements, monitoring and evaluation.

### **C. Current problems of the private initiatives**

Generally speaking, some of the current problems of the private initiatives can be attributed to both the forest sector and the business environment of this country. The main problems are as follows:

1. Numerous, often-unwarranted inspections take place. Private forest operators and processing units are subject to and suffer from overly frequent audits and inspections by different state control agencies: State Financial Agencies (Republican-, Province-, and District- levels); Social Fund (3 levels); Public Prosecutor (3 levels); Tax Inspection (3 levels); Militia Bodies (criminal, economic, 3 levels); Fire Inspection: Sanitary Control; State Ecological Control (National, Local); Forestry Department (3 levels); etc.
2. A complex procedure to get permits is in practice, and transparency in forestry bidding is lacking. Since the participatory procedure of tenders is still not formalized anywhere, there is

<sup>30</sup> [www.stat.kg](http://www.stat.kg)

<sup>31</sup> Provisional assessment of the National Statistic Committee

always room for non-formal decisions in the interests of a specific party (friends, relatives, etc.).

3. Credit interest rates are high, ranging from 12 to 27 per cent. Taking out a mortgage is obligatory.
4. Taxes and fees are high. The profit tax is 10 per cent. Because the yearly turnover of the majority of private operators and processors is less than the threshold amount of 4 million KGS, only few forest operators and processors pay VAT (12 per cent of the turnover). 17 per cent of the employee wages are to be paid to the Social Fund by an employer as an insurance due. Sales tax is from 1.5 to 3.5 per cent of total sales. There are also real estate and movable property taxes. The land tax is paid by forest plot lessors.
5. Corruptive trends in public service today are supported by entrepreneurs themselves because nobody knows the exact rights nor has complete information about the obligatory procedures. Many of them prefer to pay extra to spare the time and effort otherwise spent in getting various pieces of documentation.
6. The practice of short-term contracts for private forestry operators does not stimulate any investment in long-term forest infrastructure (roads, bridges, etc.).

## VII. Recommendations

What follows is a set of recommended strategies in different arenas for increasing financing flows for SFM, including new and innovative solutions.

### A. Legislation

A special legal provision for sustainable forest management should be integrated into the National Forestry Development Concept. Also, a separate survey document (addendum) could be developed to research societal consensus on this forest governance issue. Strengthening the SFM aspect in the Country Development Strategy could be the first step towards a balance between forest production and protection of the forests. To do this, a clear proposal on the merits of SFM backed up by solid figures should be prepared for debate in the Government.

Development of a new NAP 2010-20XX should be more participatory, including all the stakeholders and taking into account real available resources. The comprehensive strategy for SFM funding in the new NAP should be developed based on the existing national forest policy provisions and integrated into the overall state financial system.

### B. Forest management

The data available on the national forest resources in (a) all the concerned institutions (i.e., Department on Forest Ecosystem Development, Forest Inventory and Management Planning Department, National Statistic Committee and the State Land Management Committee), (b) information exchange and (c) updating modalities should be clarified.

The “polluter pays principle” should be operationalized in the forest sector. This could be applied to all those who disturb cadastral forest lands and to violators of forest legislation and related rules and regulations.

Improvement of inter-sectoral cooperation in the implementation of the Plan of Activities on Forest Law Enforcement and Governance (FLEG) could further contribute to improvement of FLEG. Inter-agency agreements on forest violations prosecution should be upgraded on the basis of the newly endorsed Plan of Activities on FLEG and supported from clear budget items of these agencies. A new format of field-level cooperation should be developed to cope with these law violations.

Priority of reforestation activities should be financed through reduction or abolition of the tax on special means and through reducing or exempting *Leshozes* from irrigation fees used to water new plantations.

Since a shortfall of internal finance for SFM will still be the case in the future, more attention should be given to international projects and their alignment of objectives to the National Action Plan. A comprehensive strategy should be developed for demonstrating Kyrgyzstan commitment to continuing SFM activities to all possible international donor/partners organizations, especially to ones promoting carbon sequestration and other means of mitigating climate change consequences.

The principles of good governance should become a daily practice, and not merely a slogan. Civil society and private sector participation could strengthen the capacity of the state in its transition to SFM. Clear participatory tools would need to be developed and introduced.



### **C. State forest governance institutional set-up**

The reform of the state forest governance should continue in the direction of decentralization, deconcentration and privatization.

Institutionalization of the separation between regulatory/control functions and production functions should continue. The handing over of productive activities to the private sector should be reflected in the next forestry National Action Plan. At the same time, more operational responsibility should be shifted to the field level (to the state forest management units - *Leshozes*)

Concerning power decentralization, more responsibilities in forest management should be shared between forest management units and local communities and their Local Self-Governments.

### **D. Forest finance**

Rationalization of public funding as well as more efficient funding for SFM requires more flexibility in finance administration. A shift from input-based budgeting (for instance, the number of forest staff employed) to programme budgeting, with account taken of the planned outputs (forested area increase, contribution to GPD), should be lobbied for.

Institutional optimization should be supported by transferring many tasks and responsibilities currently undertaken by the public sector to the private sector and civil society. Promoting the engagement of private consultants to develop a new forestry tariff grid could be a first step. Public hearings and transparent audits could increase confidence and trust in the state forest sector.

A financial annex should become an integral part of all new legal provision proposals with the ongoing administrative reform.

Support for private initiatives and investments in the forest sector could be promoted through credit incentives and tax exemptions. Best practices of private forest operators can be encouraged by means of preferences in the process of contract bidding.

The present forest plot leasing system should be reviewed and modified, with special emphasis given to the development of the legal framework and of practical procedures towards good governance principles. Payment modalities should be clarified.

The introduction of modern fiscal tools and mechanisms should certainly be included in the work plans of the national SAEPP Office in the near future. Such tools and mechanisms include (a) a study of existing experience, (b) adaptation to local legal frames, (c) probation period in selected areas, (d) adjustments and endorsement by authorities, (e) educating of stakeholders and (d) raising of public awareness on this issue. The topic of ESP should be included in the agenda of inter-state negotiations with neighbouring downstream countries.

### **E. Personnel**

Today, there is almost unanimous agreement to organize regular enhancement training and capacity building on the issues of fiscal and economic reform in the forest sector. Training and capacity building should be done through the system of in-service training courses regularly provided for the management staff of the SAEPP at different levels. Certain funds for such activities could be budgeted into the Republic Nature Protection and Forestry Development Fund.

An increase in the basic salary of foresters is an urgent issue for decision makers. Another way to increase foresters' basic salary would be to lobby for the state forest management units to use generated income for wage increases as an incentive tool to motivate the staff.



#### **F. Strengthening of “state-private” (public-private) collaboration**

State-private cooperation goes far beyond the forest sector, often requiring political decision-making. Reducing the number of agencies that control private operators and SAEPF forest management units, and clearly defining inspection schedules and modalities should become the main topics of negotiation with all controlling agencies and the Government. Proactive lobbying for simplification of the procedures of “special means” management/administration in the Ministry of Finance could also facilitate public-private cooperation.

Decentralization of management would lead to internal financial decentralization within the field forest management units, which would result in actual and potential opportunities for economic activities and cooperation with the private sector. Decentralization also presupposes improving contract management, revising existing contracts, and making the bidding procedure more open, inclusive and public.

## VIII. Conclusion

As noted in the introduction, the objective of this document is to produce an analytical report on forest financing in the case of the Kyrgyz Republic. In the course of this work, all available relevant and up-to-date information on forest financing has been collected and analyzed. It turned out that the data available from different sources was sometimes contradictory. An ensuing debate contributed to a decision to look jointly for ways to establish a reliable database on the national forest resources and sustainable use of forest lands. Two open discussions on the topic of SFM financing by experts from institutions of the public and private sectors and civil society revealed interest in the SFM approach and shed light on the current internal funding situation.

The case study shows that considerable changes in the near future as far as state budget allocations to the forest sector are concerned are hardly to be expected. Thus, administrative barriers curbing self-financing opportunities of the state forest management units should be removed. The Republic Nature Protection and Forestry Development Fund shows promise in providing institutional support to the *Leshozes* transfer of function from production to regulation. New financial mechanisms and tools already used in many countries could undoubtedly contribute to the financial sustainability of SFM. An important means to overcoming the shortage in state funding is inter-agency cooperation. However, this has always been a barrier for the state institutions because of chronic underfunding of budget. There are many intentions expressed during the joint forums, but in reality, cooperation is reduced to a few formal events in order to show off.

More favourable conditions should be established for private initiatives in forestry and processing as an alternative source of finance to promote SFM. Public-private cooperation should become one of the national priorities to give a new impetus to general economic development.

At the same time, organizations of the non-governmental sector today are also ready to carry out various functions. Fair access to resources and a transparent decision-making process are always in the sights of civil society. "Sustainability" is a sacred word in the NGO community. They have already taken upon themselves a number of social services, including the forest sector. They could act as intermediaries between the government, citizens, self-governance bodies of the communes and private businesses.

The international community is contributing considerable support today towards ensuring environmental security and sustainability of nature ecosystems. Support to the "green sector" can still be improved as far as liaising of the help is concerned. Consultative meetings could become an important coordination and informational tool to verify ongoing support programmes.

In writing this case study, the authors came to a general conclusion that is relevant to all segments of financial sustainability of the Kyrgyz forest sector. This conclusion is that *active dialogue and partnership between the state, private sector, communities and civil society is the main condition for ensuring sustainability of all the stakeholders - the state machinery, business, civil society and communal institutions - in their work for the benefit of environment, society, and human development, SFM being one of the elements*. This requires certain joint efforts and actions:

- Distribution and clarification of responsibilities of the state and other actors of the forest sector under new conditions
- Development of interaction between the governmental institutions and other stakeholders of the sector in the decision-making process and outsourcing of state contracts for provision of forestry services, etc.
- Identification of partnership potential and securing interests of all the parties in the formulation and implementation of policies on natural resource management and socio-economic development

- Independent monitoring and information exchange as a tool of local communities' control over the state forest management units

The direction taken in further development of SFM depends on the launching of effective dialogue. Pursuit by the State of a policy that is in the interest of all the stakeholders of the sector depends on the cooperation of the new political leadership with civil society and business, which could result in increased trust and confidence on the part of society. Such cooperation could reconcile the many contradictions in the transition economy, by approaching problems through representative democracy in the form of self-governance bodies and the participation of all people in market transformations. In addition, benefits of these transformations would be shared.

The system of forest governance in Kyrgyzstan still has a long way to go before it can take on all needed reforms and innovations. It has to progress from its closed, eco-centric narrow technical mentality to openness and wide representation of all groups of interests; from abstract appeals for forest protection to specific inclusion of local people in SFM; from development of numerous strategies to development of practical collaboration instruments with a clear distribution of rights, responsibilities and benefits of forest cooperation.

The events of spring 2010 give Kyrgyzstan a second chance to change towards being a society that is on the road to economic transition and democratization, even under such challenging or truly drastic conditions.

## IX. References

- Bern University of Applied Sciences, School for Architecture, Civil and Wood Engineering HSB (2004), *Value Added Chain. Timber Industry – Kyrgyz Republic*, Biel.
- Forest Code of the Kyrgyz Republic (8 July 1999 # 66).
- Indufor (May 2010), *Report on the Workshop on the Kyrgyzstan case study debate* Bishkek.
- Intercooperation (2010), *15 years of the Kyrgyz-Swiss Forestry Support Programme*, (RUS), Bishkek.
- Intercooperation Kyrgyzstan (2007), *Legal and institutional base for the forestry development in the Kyrgyz Republic*. Bishkek.
- Intercooperation Kyrgyzstan (2009), *Joint Forest Management*, Bishkek.
- Intercooperation Kyrgyzstan (2009). *Map: Forests of the Kyrgyz Republic*. Bishkek.
- Intercooperation Kyrgyzstan (2009). *Map: Location of the forests of the Kyrgyz Republic*. Bishkek.
- Kyrgyz Academy of Sciences (1987), *Atlas of the Kyrgyz Republic*, Moscow.
- National Statistic Committee (2010), *Socio-economic situation in the Kyrgyz Republic: January-December 2009* (KYR, RUS). <http://www.stat.kg>
- Public Foundation ECO-GUIDE, (2009). *Independent midterm evaluation of the Kyrgyz Forestry NAP 2006-2010*. Bishkek.
- SAEPF, GEF, UNDP (2008), *Fourth National Report on Biodiversity of the Kyrgyz Republic*, Bishkek.
- SAEPF, Intercooperation Kyrgyzstan (2004), *Concept of the Forestry Sector Development*, Bishkek.
- SAEPF, Intercooperation Kyrgyzstan (2004), *National Forest Programme for the period 2005-2015*, Bishkek.
- SAEPF, Intercooperation Kyrgyzstan (2006), *National Action Plan for the Development of the Forestry Sector for the period 2006-2010*, Bishkek.
- SAEPF, Intercooperation Kyrgyzstan (2007), *60 years to Forestry of Kyrgyzstan (RUS)*, Bishkek.
- Savcor Indufor Oy (2005). *Ensuring sustainability of forests and livelihoods through improved governance and control of illegal logging for economies in transition*. Helsinki.
- SIAR (2002), *Marketing survey of processed forest products in the Kyrgyz Republic*. Bishkek.
- UNDP (2005), *Kyrgyzstan at a new stage of development*. Bishkek.
- UNDP (2009), *Human Development Report 2009*. <http://hdr.undp.org/en/reports/global/hdr2010/>
- UNDP (2009), *The Second Periodic Progress Report on the Millennium Development Goals in the Kyrgyz Republic*. Bishkek.
- World Bank (2007), *Kyrgyz Republic: Poverty Assessment. Report No. 40864-KG*. Washington DC: World Bank.
- Websites visited:
- <http://comtrade.un.org>
- <http://faostat.fao.org>
- <http://www.esds.ac.uk>
- <http://www.minfin.kg>
- <http://www.stat.kg>
- [www.kyrgyzstan.orexca.com](http://www.kyrgyzstan.orexca.com)

# LIST OF THE WORKING GROUP AND INTERVIEWED EXPERTS

#	Name	Occupation	Contacts
<b>Working group members</b>			
1.	Abdymital Chyngojoev	State-Secretary of SAEPF	Bishkek, Toktogul Str. 228; Tel. 35 27 27 <a href="mailto:abdymital@bk.ru">abdymital@bk.ru</a>
2.	Bakyt Koichumanov	Head of the Department in the Forest Ecosystems Developmet	Bishkek, Gorky Str. 142, Tel. 54 92 16, mob. (772) 52 34 48 <a href="mailto:Koichumanov_B@mail.ru">Koichumanov_B@mail.ru</a>
3.	Gulsara Sulaimanova	National Statistic Committee	Tel. 62-56-07 <a href="mailto:Social-nsc@rambler.ru">Social-nsc@rambler.ru</a>
4.	Joomart Chomoev	Deputy Head of Financial and Economic Department of SAEPF	Bishkek, Toktogul Str. 228; Tel. 35 30 97
5.	Asanbaeva Janat	Bookkeeper of the Forestry Department	mob. (0 543) 91 74 27
	Nurlan Jumaev	Senior Specialist of Forestry Department of SAEPF	Bishkek, Gorky Str. 142, mob. (0 555) 97 48 08
6.	Irsaliev Baktybek	Senior Specialist of Forestry Department of SAEPF	Bishkek, Gorky Str. 142, mob. 0555 41 41 48
7.	Kadyr Alikeev	Independent Forestry Finance Expert	mob. (0 543) 94 47 67
8.	Aleksandr Temirbekov	Independent Expert, Indufor Consultant	mob. 0775 97 48 47 <a href="mailto:atemirbekov@mail.ru">atemirbekov@mail.ru</a>
<b>Interviewed specialists</b>			
1.	Topchubek Turgunaliev	Director of SAEPF	Bishkek, Toktogul Str. 228; Tel. 35 27 27
2.	Bahtiyar Fattahov	Acting Director of the National Agency on the Affairs of Local Self Governance	Bishkek, Kievskaya Str. 96 b; Tel. 62 82 01
3.	Aitkul Burhanov	Former Deputy Director of SAEPF	mob. 0543 872279 <a href="mailto:aburhanov@mail.ru">aburhanov@mail.ru</a>
4.	Yzatbek Toktomambetov	Director of SE Kyrgyzautoroads, Ministry of Transport and Communications	Tel. 31-42-84 Mob. 0772 62 22 09
5.	Kalyiman Beisheeva	Head of Finance and Economy Department of SAEPF	Bishkek, Toktogul Str. 228; Tel. 45 66 10
6.	Ruslan Sadyrbaev	Senior Specialist, Ministry of Finance	mob. 0555 77-72-40
7.	Gulhumar Abdullaeva	National Statistic Committee	Tel. 62 56 07 <a href="mailto:Social-nsc@rambler.ru">Social-nsc@rambler.ru</a>
8.	Jenish Jakypov	Head of the Unit for Methodology of the Fiscal Policy, Ministry of Economy Regulation	Bishkek, Chui Prospect mob. 0555 78-78-62
9.	Abdymalik Egemberdiev	Director of the Department on Pastures, Ministry of Agriculture	mob. 0701 00-10-02
10.	Tatan Esenbol	Deputy Director of the Department on Pastures, Ministry of Agriculture	Tel. 90 98 48, mob. (0 555) 26 66 05
11.	Ulan Myrzakmatov	Department on Pastures, Ministry of Agriculture	Tel. 90 98 48
12.	Ekaterina Sahvaeva	Agency on water resources, Ministry of Natural Resources	Tel. 56-63-38
13.	Nikolai Paramonov	National Agency on the Affairs of Local Self-governance	Bishkek, Kievskaya Str. 96 b; Tel. 66 17 05
14.	Nazgil Tyulegenova	National Agency for the Affairs of Local Self Governance	Bishkek, Kievskaya Str. 96 b; Tel. 66 17 05 <a href="mailto:nazgul_tu@mail.ru">nazgul_tu@mail.ru</a>

# Annex 1

#	Name	Occupation	Contacts
15.	Tilek Asanbekov	Director of the Republican Fund for Nature Protection and Forestry Development	Bishkek, Gorky Str. 142, Tel. 54-07-10, Mob. 0553 63-10-11
16.	Azat Kenenbaev	Deputy Director of the Republican Fund for Nature Protection and Forestry Development	Bishkek, Gorky Str. 142, Tel. 54-07-10,
17.	Ilyas Jumaev	Director of the Association of Forest Products Processing Enterprises of KR	mob. 0772 01 07 05 <a href="mailto:apppl@yandex.ru">apppl@yandex.ru</a>
18.	Muslim Radjpaev	Science Secretary of the Forest Research Institute of National Academy of Sciences	Bishkek, Karagachovaya Rostch 15; Tel. 67-80-56, mob. 054315 92 37 <a href="mailto:institute@lesic.elcat.kg">institute@lesic.elcat.kg</a>
19.	Kimura Uzuru	JICA, Forestry Project Technical Adviser	Bishkek, Gorky Str. 142, Mob. (0 772) 25-69-78, Tel. 47-90-82
20.	Nurlan Sultanov	JICA, Forestry Project Expert	Bishkek, Gorky Str. 142, mob. 0772 81 17 68 <a href="mailto:nsultanov@mail.ru">nsultanov@mail.ru</a>
21.	Vladimir Grebnev	UNDP, Environment for sustainable development programme	Bishkek, Orosbekova Str. mob. 0543 92 29 95 <a href="mailto:v_grebnev@up.elcat.kg">v_grebnev@up.elcat.kg</a>
22.	Mirbek Ilyazov	UNDP, Environment for sustainable development programme	Bishkek, Orosbekova Str. Tel. 66 35 27
23.	Askar Satybekov	GEF/WB Tian Shan Ecosystems Development Project	Bishkek, Kalyk Akiev Str. Mob. 0543 91-19-50
24.	Aibek Baidaliev	GEF/WB Tian Shan Ecosystems Development Project	Bishkek, Kalyk Akiev Str.
25.	Mairambek Aliev	Deputy Director of Forest Department (2008-2010)	Bishkek, Kalyk Akiev Str. Mob. 0773 27 27 07
26.	Victor Domaev	Director of the Issyk-Kul Leshoz	Ananyevo, Lenin Str. Mob. 0543 05 94 13
27.	Ilya Domashov	NGO BIOM	Mob. 0543 14 15 00 <a href="mailto:idomashov@gmail.com">idomashov@gmail.com</a>
28.	Oleg Pechenyuk	NGO Independent ecological Expertise	Mob. (0 555) 78 19 35, Tel. 57-83-72 <a href="mailto:op_67@mail.ru">op_67@mail.ru</a>
29.	Kamil Ashimov	Head of the Monitoring and Forest Inventory and Management Planning Department of SAEPF	Bishkek, Leo Tolstoi Str. 4, Tel. 54-03-99
30.	Kapar Bakyrchakov	Monitoring and Forest Inventory and Management Planning Department of SAEPF	Bishkek, Leo Tolstoi Str. 4; Tel. 54-31-56, Mob. (0 555) 51-57-54
31.	Jyparkul Bekkulova	Department for ecological strategy and policy, Head	Bishkek, Gorky Str. 142, Tel. 56-06-37
32.	Natalya Baidakova	Department for ecological strategy and policy, Deputy Head	Bishkek, Gorky Str. 142, Tel. 54-91-52
33.	Bekbolot Mamatairov	Department for ecological strategy and policy	Bishkek, Gorky Str. 142, Tel. 54-91-52
34.	Elina Prohorenko	Silviculture Chair, Kyrgyz Agrarian University	Bishkek, Mederov Str. Mob. 0543 09 77 35
35.	Emil Ibraev	Unit of Specially Protected Nature Territories	Bishkek, Gorky Str. 142, Tel. 56-41-95
36.	Baglan Salykmambetova	SAEPF, International relations Unit	Bishkek, Gorky Str. 142, Tel. 54 52 82, Mob. (0 555) 70 22 50

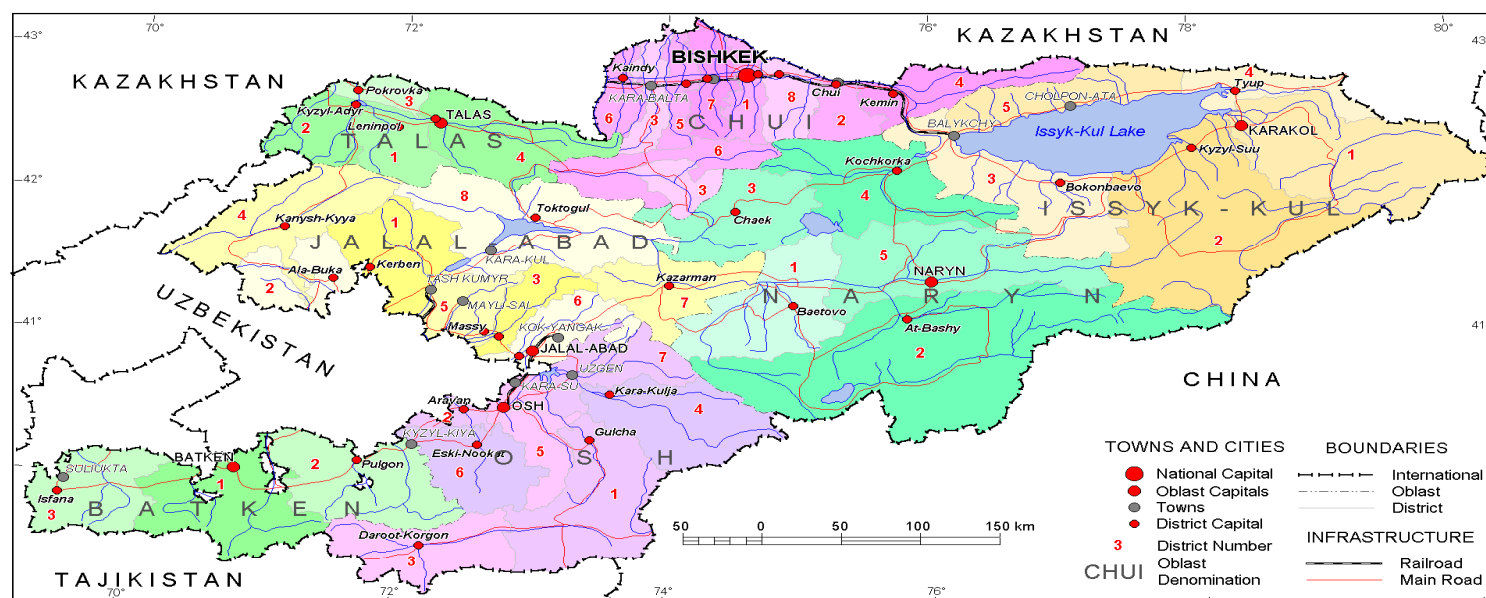


**Annex 1**

#	Name	Occupation	Contacts
37.	Zuhra Rizaeva	Department for ecological strategy and policy	Bishkek, Gorky Str. 142, Tel. 54 52 82, Mob. (0 543) 92-29-95
38.	Narynbek uulu Ruslan	Senior specialist of SAEPF Finance and Economy Department	Bishkek, Toktogul Str. 228; Tel. 35-30-96

DRAFT

## MAP OF ADMINISTRATIVE DIVISIONS OF KYRGYZSTAN



Boundaries are not authoritative.  
© Digital layers created by GIS-Service Ltd.,  
Bishkek, 2001. Source: Administrative Map, 1999.

Chui Oblast			Capital: Bishkek
No	District	Capital	
1	Alamudun	Lebedinovka	
2	Chui	Chui	
3	Jail	Kara-Balta	
4	Kemin	Kemin	
5	Moskva	Belovodskoe	
6	Panfilov	Kaindy	
7	Sokuluk	Sokuluk	
8	Issyk-Ata	Kant	

Batken Oblast			Capital: Batken
No	District	Capital	
1	Batken	Batken	
2	Kadamzhai	Pulgon	
3	Lailak	Isfana	

Jalal-Abad Oblast			Capital: Jalal-Abad
No	District	Capital	
1	Aksy	Kerben	
2	Ala-Buka	Ala-Buka	
3	Bazar-Korgon	Bazar-Korgon	
4	Chatkal	Kanysh-Kyia	
5	Nookan	Massy	
6	Suzak	Suzak	
7	Toguz-Toro	Kazaman	
8	Toktogul	Toktogul	

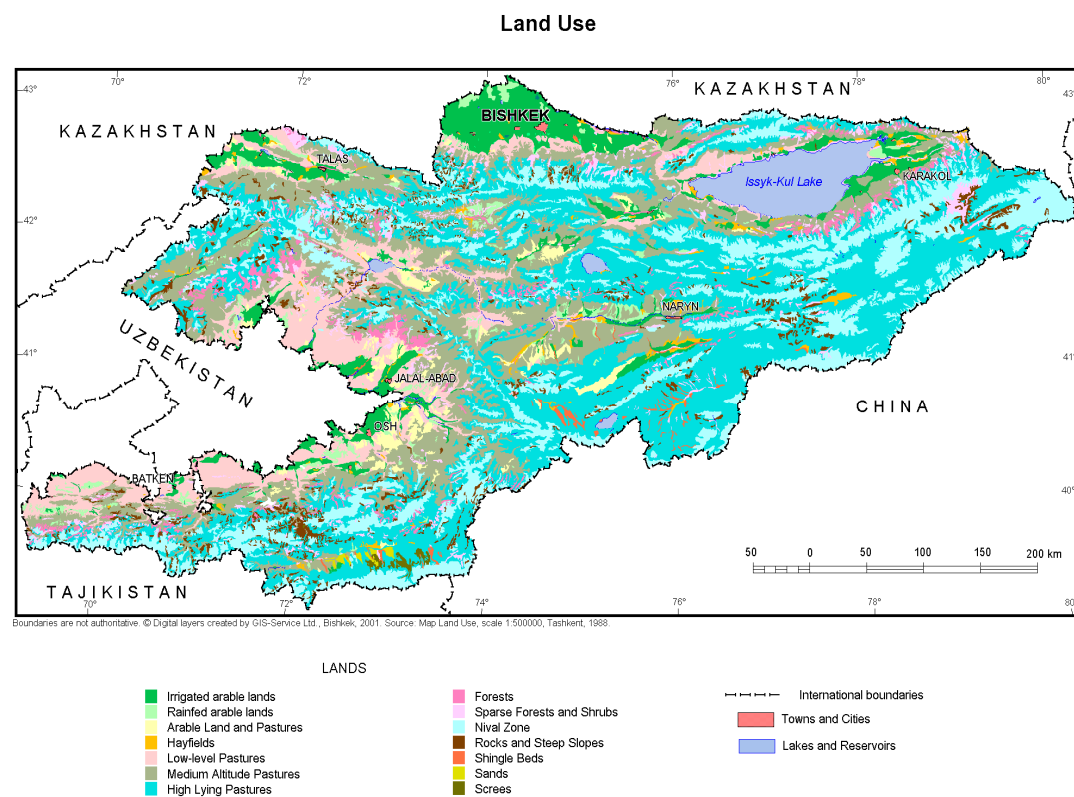
Issyk-Kul Oblast			Capital: Karakol
No	District	Capital	
1	Ak-Su	Karakol	
2	Jety-Oguz	Kyzyl-Suu	
3	Ton	Bokonbaevo	
4	Tyup	Tyup	
5	Issyk-Kul	Cholpon-Ata	

Naryn Oblast			Capital: Naryn
No	District	Capital	
1	Ak-Tala	Baetovo	
2	At-Bashy	At-Bashy	
3	Jumgal	Chaek	
4	Kochkor	Kochkorka	
5	Tien-Shan	Naryn	

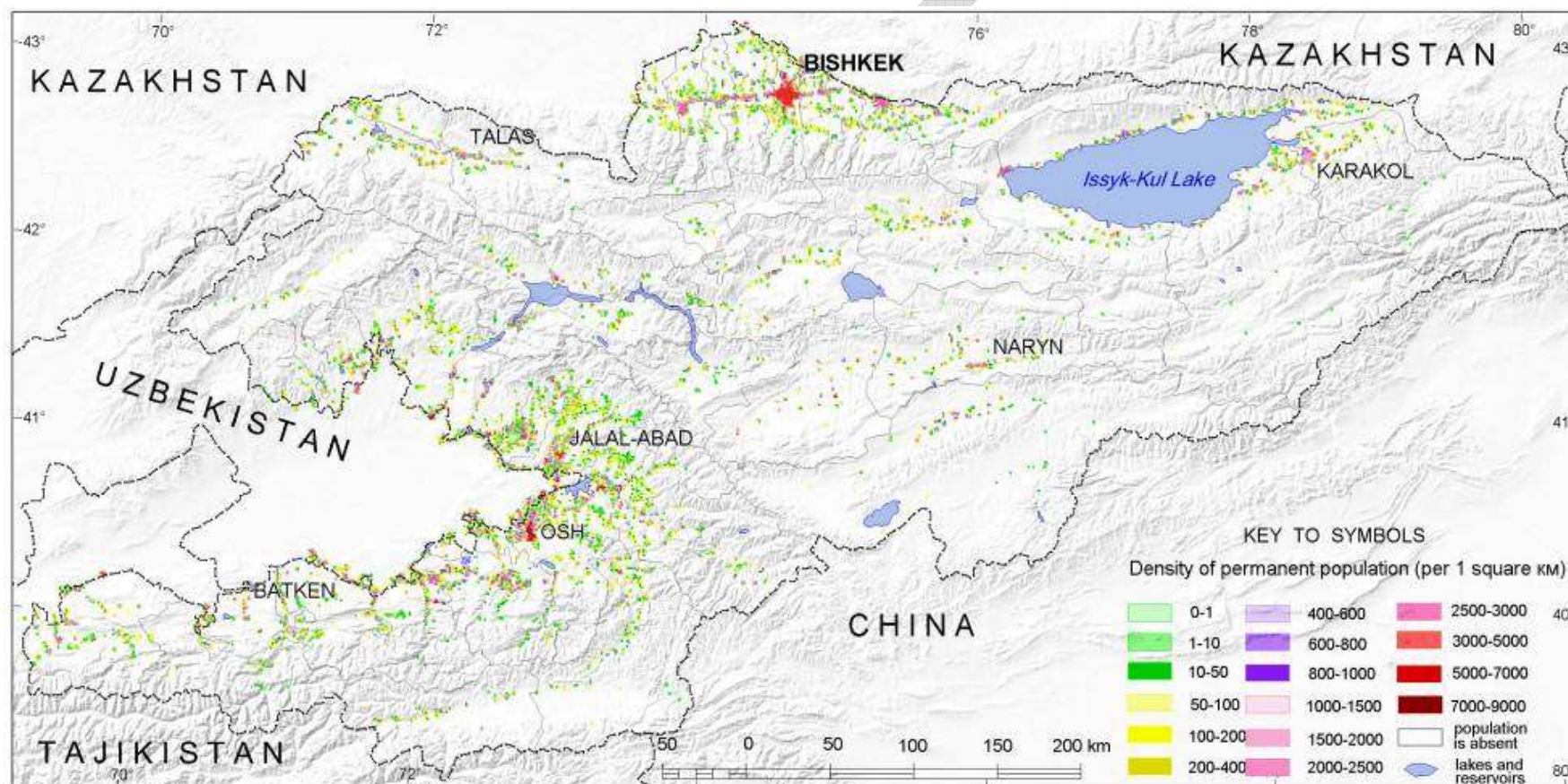
Osh Oblast			Capital: Osh
No	District	Capital	
1	Alai	Gulcha	
2	Aravan	Aravan	
3	Chon-Alai	Daroot-Korgon	
4	Kara-Kulja	Kara-Kulja	
5	Kara-Su	Kara-Su	
6	Nookat	Eski-Nookat	
7	Uzgen	Uzgen	

Talas Oblast			Capital: Talas
No	District	Capital	
1	Bakai-Ata	Leninpol	
2	Kara-Buura	Kyzyl-Adyr	
3	Manas	Pokrovka	
4	Talas	Talas	

## MAP OF THE LAND USE IN KYRGYZSTAN

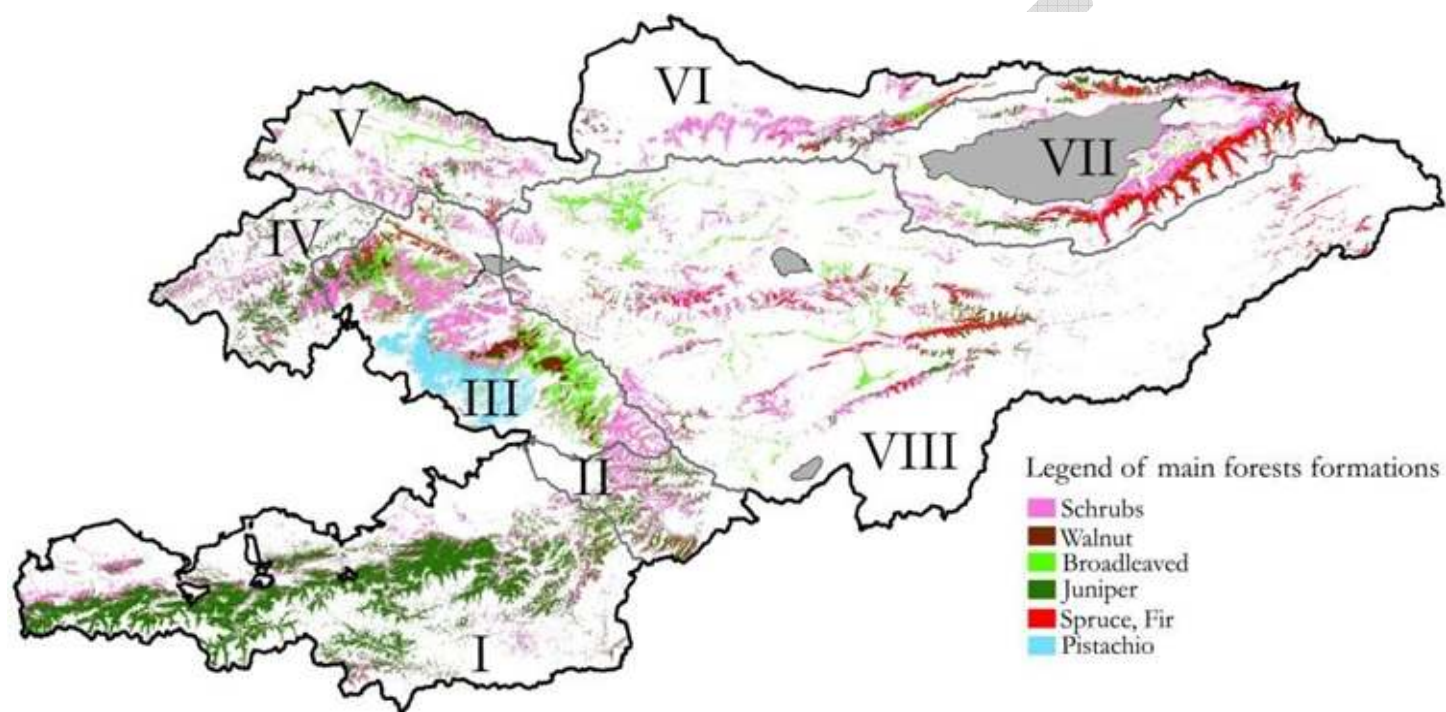


# MAP OF THE POPULATION DENSITY OF KYRGYZSTAN





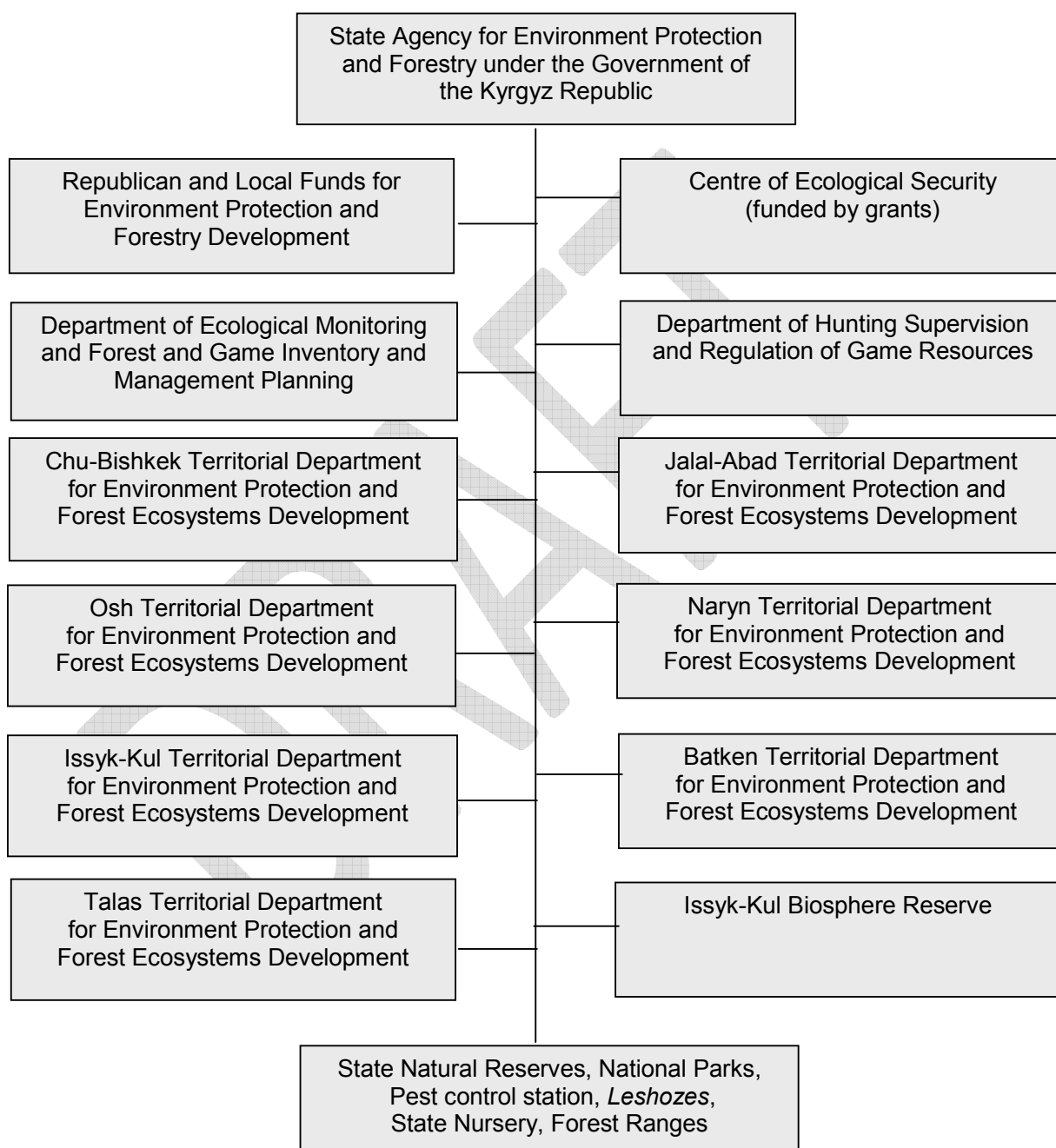
## MAP OF THE FORESTS OF KYRGYZSTAN



Forest-Growing Regions			
I	Turkestan-Alai	V	Talas
II	Fergana-Alai	VI	Chui-Kemin
III	Fergana-Chatkal	VII	Issyk-Kul
IV	Chatkal	VIII	Inner Tian-Shan

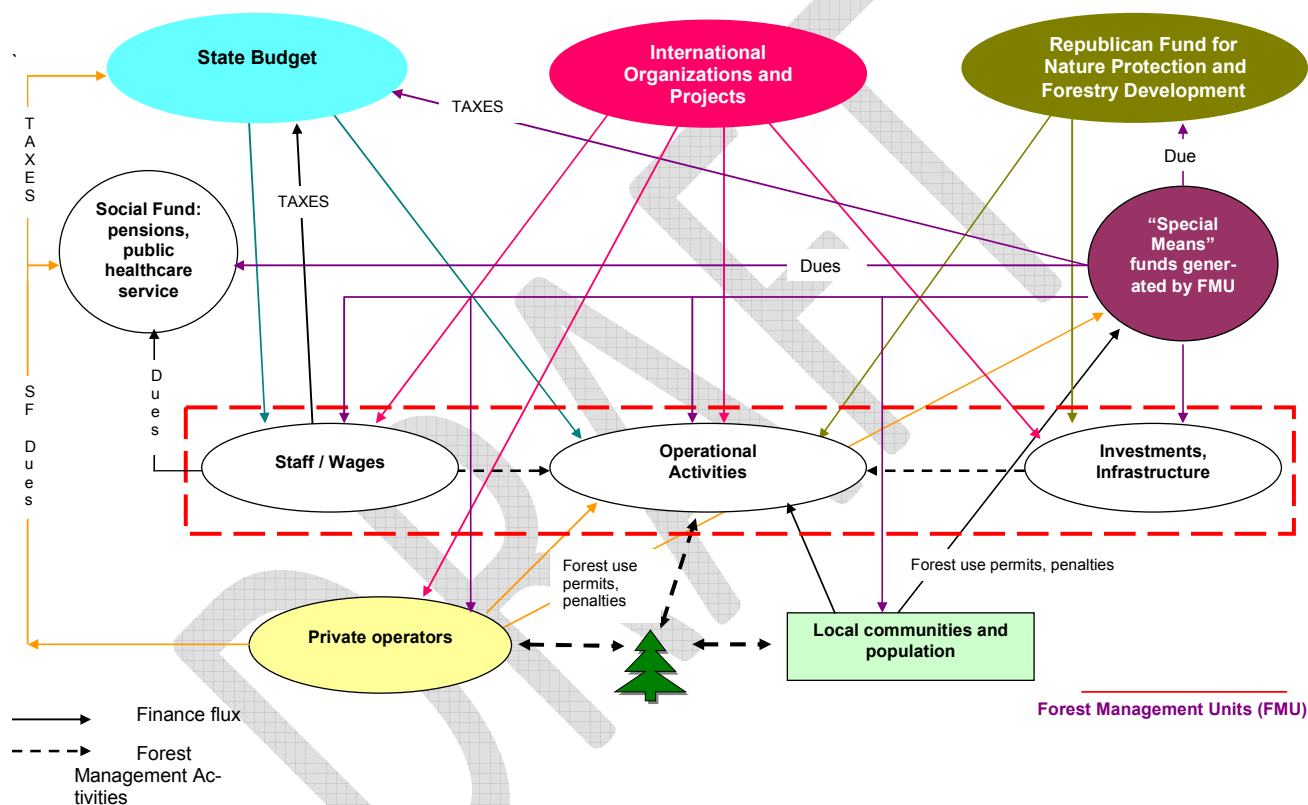
# MANAGEMENT ORGANIGRAM OF SAEFF

Approved by the Resolution of the Government of the Kyrgyz Republic of 18 December 2009 # 788





# SCHEME OF THE KYRGYZ FORESTRY SECTOR CURRENT FUNDING



**FINANCE AND ECONOMIC ACTIVITIES OF THE STATE FOREST MANAGEMENT UNITS**

56 forest management units	Income 2008 Thousand KGS																					Total
	Planting material	Land leasing payment	Leasing of orchards	Transport services	Hay making	Natural resource leasing	Mountain fruit	Seeds	Livestock grazing	Machinery amortization	Forest production	Pasture leasing	Industry	Farming and tourism	Cattle husbandry	Agro-products	Funds	Claims	Medicinal herbs	Beekeeping	Other	
	10 631.7	7 587.4	107.1	44.5	325.3	976.0	5 928.2	3.5	14.5	7.0	15 092.1	6 795.0	176.2	568.4	153.9	211.1	1 044.2	1 829.5	32.0	3 332.8	7 890.9	

56 forest management units	Cost of productive activities	Net income	Silviculture and reforestation expenditures (fact)	Total expenditures	Sources of funding	
					Budget	Special means
					87 472.6	53 895.3

56 forest management units	Income 2009 Thousand KGS																				Total
	Planting material	Land leasing payment	Leasing of orchards	Compensation of deficit	Assets sale	Natural resource leasing	Walnut nuts	Transport service	Hay field leasing	Forest production	Pasture leasing	Industry	Farming and tourism	Cattle husbandry	Forest income	Funds	Claims	Medicinal herbs	Beekeeping	Other	
	10 138.2	7 528.3	316.5	415.1	62.0	3 022.4	3 405.9	91.0	391.4	11 744.4	8 436.7	401.2	1 221.5	90.3	134.9	2 072.0	4 953.5	18.2	2 749.9	11 486.5	68 680.4

56 forest management units	Cost of productive activities	Net income	Silviculture and reforestation expenditures (fact)	Total expenditures	Sources of funding	
					Budget	Special means
					110 576.4	59 728.9



**Indufor** ...forest intelligence

DRAFT

**Indufor Oy**  
Töölönkatu 11 A  
FI-00100 Helsinki  
Finland

Tel. +358 9 684 0110  
Fax +358 9 135 2552  
[indufor@indufor.fi](mailto:indufor@indufor.fi)  
[www.indufor.fi](http://www.indufor.fi)

