Forests and the Biodiversity Convention

Independent Monitoring of the Implementation of the Expanded Programme of Work in Kyrgyzstan

BIOM
Kyrgyzstan

Global Forest Coalition

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Cover:

Nuciferous forest in Sary-Chelek protection area, one of the most natural forest types in Kyrgyzstan.
Photographer: Domashov Ilia (BIOM)

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EXECUTIVE SUMMARY

Today discussion on the forests topic is especially urgent for Kyrgyzstan. First, because the quantity of forests degradation and deforestation factors increased and, secondly, because forests are the strategic resource for Kyrgyzstan. Kyrgyzstan's forests are national wealth of people, they are in state property, and they play a big role in development of the economy, improvement of the environment, they have a good influence on climate, atmosphere, water regime of rivers, and they protect soil from wind and water erosion.

All forests of Kyrgyzstan, as especially valuable, are under protection according to the Forestry Code. Nowadays the Kyrgyz Republic faces with necessity of productive potential of forest production maximization, which is in huge demand, and with the problem of preservation of country's forest part for ecological good. Ecological good means sustainability and effective forest management, and also creation of new planting by reforestation and foresting. In addition it is necessary to find mechanisms of local communities' integration into stable process of forest management.

Since 1998, Kyrgyzstan is committed to conserve biological diversity in accordance with the National Action Plan on Conservation of Biological Diversity. During last decade, changes were made in the forestry sector of Kyrgyzstan, which shall be considered as important step towards further development of the forestry policy.

In spite of official data on increased percentage of forest land of the country, the experts state out trend regarding reduction of areas covered by the forests. Also, there is trend of weaken protection of forests – general protection ability of the forests is decreased because of delegation of protection functions in practice from leskhozes to local population. Besides, statistical assessment takes into account regional changes of the forests, but does not consider quality of the forests – trends of rehabilitation or deterioration of state of the natural ecosystems. Also, there is still conflict related to access of the local population to natural wood and non-wood resources of the forest. This conflict is associated with definition of the entities, which will get benefit from resource use.

Nuciferous forest in Sary-Chelek protection area, by Domashov Ilia (BIOM);

As a result of independent monitoring on implementation of the Expanded Programme of Work on Forest Biological Diversity of the Convention on Biological Diversity (CBD/POW) in Kyrgyzstan at this moment could be distinguished following:

- In spite of official data on increased percentage of forest land of the country, the experts state out trend regarding reduction of areas covered by the forests. From the other hand, it is not only reduction of forest area; there is also deterioration of state of natural ecosystems;

- There is trend of weaken protection of forests – general protection ability of the forests is decreased because of delegation of protection functions in practice from leskhozes to local population. So, Functions of forest protection are actually lost;

- At present, there is still conflict related to access of the local population to natural wood and non-wood resources of the forest. This conflict is associated with definition of the entities, which will get benefit from resource use;

- Specialized measures to implement commitments of Kyrgyzstan on CBD/POW were not implemented, but initiatives on forest use and management are implemented currently, which directly influence on implementation of the country's commitments, such as:
    - Extension of the network of protection areas.
    - Implementation of initiatives supported by the Swiss Bureau of Cooperation and Development and Inter-cooperation (Forestry Support Programme (KYRLES)), FAO, GTZ "Biosphere Reserve Issyk-Kol", JUMP aimed to conserve forests and forestry biodiversity.

ABSTRACT

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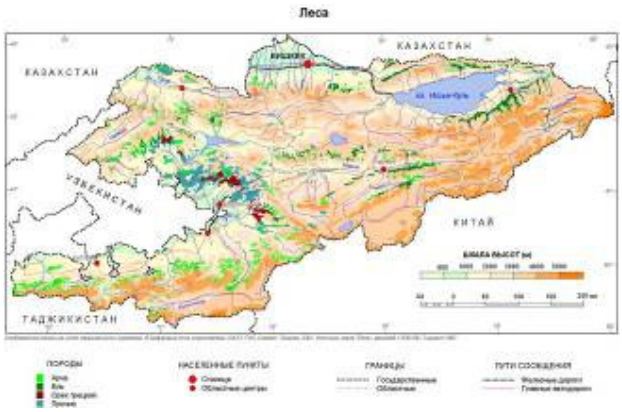
1. A BRIEF DESCRIPTION OF THE ENVIRONMENTAL, GEOPHYSICAL AND SOCIOECONOMIC ASPECTS OF A BRIEF DESCRIPTION OF THE ENVIRONMENTAL, GEOPHYSICAL AND SOCIOECONOMIC ASPECTS OF THE COUNTRY.

Geography: Kyrgyzstan is the high mountain country with a complex cross relief. Over 90% of the territory having 199 thousand square kilometers is covered by mountains with an altitude ranging from 500 to 7134 m above sea level. About 40% of territory is not suitable for habitation such as glaciers, eternal snow, rocks, talus, mountain rubbly deserts and etc. About 7% of territory is cultural landscape: fields and settlements, roads and industrial objects. High productive agriculture is available only on irrigated land, which is about 2/3 of whole arable

land. Beautiful natural conditions are favorable for the tourism development, in particular, around the Issyk-Kul Lake, Son-Kul Lake and Sary-Chelek Lake.
Climate: Distance to the nearest ocean - about three thousand kilometers – determiners general aridity and continental climate. Existence of high mountains forms conditions to form diverse local climates: from excess of warmth and shortage of moisture in foothill plains (average temperature of January is 0-2 C°, July - 26 C° and higher; precipitation in July is less than 10 mm) to excess to moisture and shortage of warmth in mountain areas (average temperature of January is below -28 C°, July is below - 6 C°; precipitation in July is up to 100-150 mm). Above 3.5 – 4 thousand meters above sea level is permafrost area with snow and glaciers.1



Population: Status on January 1, 2003 is 5 million people (According to the Republican Census, 2003) where 35% is urban population and 65% is rural one. Representative of more than 90 nationalities live in the country: the majority are Kyrgyzs (67%), Uzbeks (14%) and Russians (11%). Other nationalities and ethnic groups compose less than 10% of population. By age structure, 38% of the population is children; 53% of population is able to work and 9% is elderly people.2

2. A CHARACTERISTIC OF FORESTS OCCURRING IN THE C A CHARACTERISTIC OF FORESTS OCCURRING IN THE COUNTRY.

Kyrgyzstan's forests are wonderfully beautiful and diverse. Spruce, firry-Abies, juniper, walnut, pistachio, maple, poplar and willow, birch forests are widespread here. But juniper, spruce and walnut forests take up the largest area.

In spite of the fact, that forest communities take up only 3.5 (or 4,7) percent of the republic's area (less than 1 mln hectare), they are locality of practically 50 percent of plants and animals diversity from the whole biodiversity of Kyrgyzstan.

At present, the scientists of Kyrgyzstan continue their dispute regarding forest area. Based on opinion of some ecologists, only 3,5% of the territory is covered by forests; according to data of the State Agency on Environmental Protection and Forestry this area is 4,3% (only within territory of the state forestry fund).

All forests of Kyrgyzstan can be divided into four types:

2.1 JUNIPER FORESTS

Archa is a local name of juniper. There seven species of this plant in the republic: Archa Turkestanskaya, Talasskaya, hemisphere, Zarevshanskaya, pseudo-kazakskaya, kazakskaya and Siberian. Juniper forests cover about one third area of the forests of Kyrgyzstan (264 000 hectares). These forests are located at the altitude from 1 300 m to 3 200 m above the sea level.

Juniper is simple and grows there where other woods are not able to grow. It used to withstand rigid water and temperature regimes and therefore it is widely spread.

[1] *G.H.Yar-Mukhamedov, 1982*
[2] *Kyrgyzstan: Country general assessment, 2004*

In some places, juniper forms forests up to 20 meters of height, and decumbent juniper is able to grow in very hard conditions, which are not appropriate to other woods: on southern slopes, rocks and talus.
One of the main functions of juniper is to protect soil against erosion. Forming thick bedding from cast, they make better soil drainage increasing ground water reserves. It firms conditions under which water is immediately taken up from surface.

Juniper forests have great sanitary significance as needles of this plant discharge a lot of specific substances – phytoncides cleaning up air from pathogens.

2.2 SPRUCE FOREST

Basic forest forming woods are Tien-Shan spruce and Shrenk's spruce. Besides, it is possible to find Robert's spruce in the forests of the Western Tien-Shan, in particular around Sary-Chelek Lake.

Spruce forests occupy about one eighth part of the forests in Kyrgyzstan (111 000 hectares) and can be met at the altitude of 1600 - 3100 meters.

Shrenk's spruce is the most common one. It is straight-boled evergreen tree with brown cones. It grows both on steep and inclined slopes, sometimes – rocky sites. Compare to other species of spruce, the Shrenk's spruce likes light and requires less water. In favorable conditions its height is over 40 meters and width in diameter is 60 cm. Some ols samples are 1.5 m in diameter. Shrenk's spruce is quite perennial plant. It lives about 340-450 years.

2.3.NUCIFEROUS FORESTS

Nuciferous forests are located at the altitude ranging from 1300 to 2300 m on southern slopes of the Fergana and Turkestan mountain ranges. They are composed of Circassian walnut, Sivers apple, Sogdian plum and Turkestan maple. Total area is 600 000 hectares. These are the largest nuciferous forests on the Earth. Walnut is main forest forming wood of such forests. This type of forest is characterized by large variety of wood and shrubbery species – nuciferous forests have quite rich vegetation composition – about 300 species of grass, trees and shrubberies.

These forests can be considered as a center of formation of various cultures of fruit trees such as walnut, and others. Moreover, these forests are important to regulate water flow in Fergana valley, main agricultural area of this region. They are also significant source of livelihood of the population living in this area, especially fruits and nuts gathering.

Depending on prevailing species of plants, hazel is becoming special: short-legged, touch-me-not, apple-type, maple-type, pearl bush, pear-apple-cherry-plum-type and others. The most widely spread are purely hazel forests, short-legged with false brome grass and touch-me-not hazels with quick-in-the-hands, and pear-apple-cherry-plum type hazel forests.

2.4.FLOOD-PLAIN (TUGAI) FORESTS

These forests grow mainly along floodplains and places where ground water is close to surface. Poplar, willow and elm are the forest forming trees. On higher altitude along rivers one can find many birch, mountain ash, hawthorn and bird cherry tree. Big area in the flood-plain forests is covered by shrubberies: sea-buckthorn, dog-rose and oleaster, which are mixed usually with liana-type plants. These floodplain (tugai) forests have important local and regional ecological functions.

Due to the forest vegetation, the river bed is divided into numerous small streams. Forests favor to precipitations (influence on moisture in atmosphere precipitates within this area) and moisture distribution. Formed and stable forest reduces destructive properties of mountain rivers as it reduces speed of water flow and splits river into small water streams. Stable floodplain ecosystems increase moisture level around river. Besides, under strong floods and

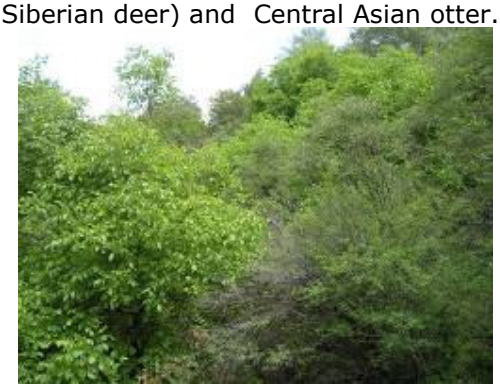
increased river level, trees close to river are washed and conductive to reduction of water flow and its destructive power.

Disturbed floodplain ecosystem leads to increased destructive power of rive what influences on moisture level and drainage of rivers because of ground water drainage.

Today, the floodplain forests are under strong man-made pressure because of intensive destroy of the floodplain trees and shrubberies, and non-controlled livestock grazing in flood-lands.

During last half a century, forest area of Kyrgyzstan was double reduced. This reduction was mainly observed in war and post-war time, in particular 1940 – 1960. Today, according to some data the deforestation area is gradually increased, and according to another data – gradually decreased[3].

At present, because of destruction of the forest ecosystems, 95 species of plants and 114 species of animals 4 are in the lists of rare and endangered species, such as Semenov's fir, tulip upward rushing, knorring hawthorn, Persian mountain ash, white wing woodpecker, paradise flycatcher, maral (Siberian deer) and Central Asian otter.



Nuciferous forest in Sary-Chelek protection area, , by Domashov Ilia (BIOM);

3. DESCRIBE LANDOWNERSHIP REGIME AND SITUATION OF THE FOREST MANAGEMENT IN THE COUNTRY

Kyrgyzstan with its mountain landscape belongs to the states having insufficient arable land. At the same time, major part of the population is involved in agriculture and stock-breeding. At the beginning of 1990-s, the land reform was launched in Kyrgyzstan, which brought to reorganization of collective farms and introduction of private property on land. During 2000 – 2005, the crucial project of land reforms was implemented in Kyrgyzstan under USAID support. It created conditions to form the land market, auction holding to sell rights on land. On January 1, 2000, 67217 entities existed including private entities – 66555 and collective – 6055. It is necessary to mention that in a course of land reforms issues on land redistribution were solved, but activities regarding land reclamation were stopped actually. Division of the cropland into small land plots led to fact that economically and scientifically sound crop rotation and other reclamation practice were suspended. It led to crucial reduction of soil fertility which is assessed today as critical situation.

One of the negative consequences of the land reforms is that land lease for short-term period does not motivate the farmers for sustainable long-term land use. Opposite, the lessees are mostly interested in getting maximum high profits without any additional costs related to land rehabilitation. It makes the situation of land use much worse in Kyrgyzstan.

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[3] This question is often highlighted at the meetings, in particular, in a framework of the Open National Meeting "Main reasons of forest degradation and deforestation in Kyrgyzstan", October 20-21, 2000.

[4] Resolution of the Government of the Kyrgyz Republic as of April 28, 2005, N 170 on the List of animals and plants of Kyrgyzstan to be included in the Red Book of the Kyrgyz Republic.

[5] Report of the working group "Capacity assessment of Kyrgyzstan on implementation of the Convention on Biological Diversity", 2004

All these factors have influence on situation with the forest management in Kyrgyzstan since withdrawal of degraded land form economic activity forces the population to occupy new land taking it from nature including the forest natural ecosystems. As a result, intensive destruction of forests in mountain and foothill areas takes place at present over the whole republic – non-controlled livestock grazing, unauthorized logging and ploughing up forest land.

Total area of the State Forestry Fund was 3163,2 thousand hectares (status on January 1, 1998). Forest covered area - 849,5 thousand hectares - 4,25% of total area6. State Agency on Forestry under the Government of the Kyrgyz Republic is the main owner of the forestry fund. It has 2833,6 thousand hectares of forestry fund, 14,2% of total area of the republic including forest area - 769,5 thousand hectares. Reserve fund is a part of the forestry fund and it is 236,2 thousand hectares, and area covered by the forest - 20,3 thousand hectares.

Considerably growing man-made impact currently brought damage to the forests. In many places incomplete vegetation was formed, and high-density vegetation was preserved only in difficult of access places in some gorges. Some forest sites were identified as in emergency situation since they have lost their ability to fulfill their ecological functions fully. New problems occurred related to conservation and increasing sustainability of the forests, their rational use, regeneration, overcoming contradictions between forestry management from one hand and need to conserve forests from another hand. Therefore, at present, the objective of rational forest management becomes a priority at the level of the state agency as well as local level (local municipalities, local public organizations, communities and etc.).

4. DESCRIBE STATUS OF THE FORESTS AND COMMUNITIES LIVING IN THE FORESTS BEFORE AND AFTER THE COUNTRY JOINED CBD/POW.

According to the Forestry Code, the forests in the Kyrgyz Republic have status of nature protected objects; they have a soil protective, water protective, climate regulating, sanitary and hygienic, recreation and other functions and protected by the state.

In accordance with the ecological, economic and social significance of the forestry fund and their functions, the state forestry fund is divided by protection categories.

The Forestry Code of the Kyrgyz Republic specifies following categories of the forest protection:

- Water protective (prohibited areas of the forests along banks of rivers, lakes, water reservoirs and other water bodies);
- Protective (anti-erosion forests, shelter belts of the forests of main traffic arteries, forests in desolate and forest-poor mountain areas having high significance for environment protection);
- Sanitary-hygienic and recreation (forests in urban areas, parks, green zone forests around dwellings, forests of the first and second belt of sanitary protection of water supply sources, forests around resorts);
- Forests of protected areas (reserves and reserve areas, national parks, game reserves, valuable forest massive, forest having scientific significance including genetic reserves and monuments of nature, and nuciferous forests).

As to the local population, the community status has not been changed since implementation of initiatives within the CBD/POW. In most cases, the communities located nearby or within the

[6] *Data of the state inventory of the forestry fund, 2006*

forest massives do not have specific status. Exception is only few communities living nearby or within (like Arkyt village) reserves.

At present, process of inclusion of the walnut forests in a framework of the UNESCO Programme of Cultural and Natural Heritage takes place.

5. COMPARE PREVAILING TECHNIQUES OF THE FOREST MANAGEMENT (INCLUDING LEGAL BASE AND LEGAL ACTS) BEFORE AND AFTER IMPLEMENTATION OF THE CBD/POW IN THE COUNTRY.

Prior implementation of the CBD/POW in Kyrgyzstan, it was only the state forest management, which was built on four levels management system – the republican, oblast, leskhozes and forest areas based on vertical subordination. Functions of the forestry fund management (inventory, account and control) and economic functions (cultivation, plantation, protection) are combined in the leskhozes and forest areas at the third and fourth levels. Management system combining controlling and economic functions as such leads to conflict.

Concept on the Forestry Sector Development to 2025 approved by the Resolution of the Government of the Kyrgyz Republic as of April 14, 2004, №256 is oriented towards transition to new system of sustainable management and use of the natural resources through improvement of the management system.

The National Action Plan of the Forestry Development for 2006-2010 approved by the Resolution of the Government of the Kyrgyz Republic as of September 27, 2006, №693, envisages improvement of the management system through division of the controlling-regulating and economic functions.

As a result of reform with regard to the forestry management system, it is planed to carry out the state forestry management and economic management of the forests in Kyrgyzstan.

The Kyrgyz-Swiss Programme and the Kyrgyz-Norwegian Programme on improvement of the forestry management system are implemented in Kyrgyzstan.

Young nuciferous forest around Arslanbob vilage by Domashov Ilia (BIOM);

Considering the fact that a major part of the rural population of the republic lives near or within the forestry fund, the Concept of the Forestry Sector Development to 2025 puts efforts to attract the population and the local communities in the participatory based forestry management, i.e. development of the participatory based forestry management.

Participatory based forestry management is to form and implement a complex of interventions regulating influence on the forests and aimed to achieve sustainable forestry management under participation of the local municipalities, population and local communities.

According to the National Action Plan (2006), the following can be used as tools of the participatory based forestry management - renting of the forest land, community based forestry management, and the integrated management plan will be a mechanism of their implementation.

The Kyrgyz-Swiss Programme, the EU Project "JUMP" and NFP Facility FAO are implemented to introduce and develop the participatory based forestry management in Kyrgyzstan.

Thus, three ways of forestry management are planed to be developed in Kyrgyzstan:

- State forestry management;
- Economic forestry management;
- Participatory based forestry management.

Besides, the EU Project "JUMP" is implemented at present, which is aimed to develop the integrated management plan for the juniper forests.

Within this project, efforts are put to involve the local communities, aiyl okmotu, forestry units in a process of development and implementation of the management plans. Moreover, management plans for juniper forests are based on resolution of specific problems of the area, such as overgrazing in the forests, logging and etc., and possible ways of sustainable forest use.

6. HOW THE COMMITMENTS ON CBD/POW ARE IMPLEMENTED BASED ON THE MARKET-ORIENTED MECHANISMS OF FOREST CONSERVATION.

Market-oriented mechanisms of forest conservation are applied in Kyrgyzstan such as renting relations and community based forestry.

Leasing of the forestry fund's land plots is regulated by the Forestry Code and the Resolution of the Government of the Kyrgyz Republic №226 as of April 15, 1997.

Forestry Fund's land plots can be given under leasing to carry out the following types of the forest use:

- Timbering (logging and sanitary logging) and secondary forest materials (stumps, bark, stick and branches for forage, branches of conifers and others);

- Mowing, agriculture cultivation, bee-gardens, gathering and processing of wild plants, fruits, nuts, mushrooms, berries and medical herbs;

- Gathering of moss, technical raw materials, bedding and leaves, reeds and other types of secondary use;

- Provision of needs of hunting (game) reserves, implementation of scientific and research activity, recreation, tourism and sport actions.

At present, 10 783 families cooperate with the Forestries based of leasing agreements.

Community based forestry management (CBFM). CBFM is regulated by the Forestry Code and the resolution of the Government of the Kyrgyz Republic № 377 as of July 27, 2001. CBFM is the forestry management organized by the local communities living within territory of the

forestry fund or in vicinity, participation of the local population in planning and implementation of the forestry activity.

Local population involved in the community based forestry management is given land plots of the forestry fund based for a long-term use, which they use according to distinguished category of land: gather nuts, mushrooms, berries, hay stocking, and gather medical herbs, bee-keeping, livestock grazing. Based on generated income, the community members carry out works of forestry management, forest planting, forestation and other works for the right to use the forestry fund. Also, they secure the forestry land from voluntary logging, fire and other offences.

Within the state forestry fund, land is determined as suitable for the community based forestry management – 44963 hectares; 7200 hectares of that land of the forestry land is given for the community based forestry management purposes where 1059 families work.

At present, there are disputes about 7 years of success of the CBFM in Kyrgyzstan. Today, allocation of land for the CBFM is suspended because of the problems including[7]:

- Potential conflict of interests, which can be determined by unfair land sharing and noncompliance of agreements in the area of forest use.

- Under implementation of protective measures on the territory allocated for the CBFM, people may fence in these plots what can lead to destruction of integrity of the forest massive. It is allowed to fence the forest? – it is still disputable and open question in Kyrgyzstan as there are many both positive and negative factors of impact on the forest caused by its fencing;

- Population does not always understand principles of the CBMF organization and ecosystem based approach. They consider the forest only as resource.

Besides indicated mechanisms of forest and biodiversity conservation, the ecologists of Kyrgyzstan have developed approaches to protect and conserve the predators through efforts of the communities – "compensatory herds". This approach can ensure not only feeding of predator species of birds and animals, but also minimizing social conflicts in the community.

7. ROLE OF THE COUNTRY IN THE FOREST BORDERING AND FOREST CONSERVATION

Forests of Kyrgyzstan have their originality and great economic significance in the global processes related to regulation of the state of environment and prevention of negative consequences of climate change. Growing along the mountain slopes, they help to prevent from landslides, mudflow and snow avalanches in the mountains, regulate water flow in rivers balancing them all year around. Therefore, the national forestry policy is aimed to increase forest areas through promoting natural regeneration and cultivation of the forest cultures.

The Government of the Kyrgyz Republic obliges for these purposes:

- Annual support of natural regeneration within area of 8 thousand hectares using at the poor forest sites partly plantation of the forest cultures closing and preventing some forest sites from the livestock grazing for a period of 10-15 years;

- Annual plantation of the forest cultures within area of 3000 hectares as reforestation (reforestation of specific valuable wood species and reforestation of the forest shelter belts) and foresting (establish industrial plantations from the fast-growing species of wood, anti-erosion plantations).

[7] *Survey on assessment of involvement of the local population in a process of community based forestry management and sharing benefits from the participatory based forest use. Ecological Movement "BIOM", FAO/NFPF. Bishkek 2006.*

Dynamics of percentage of forest land of Kyrgyzstan according to data of the State Agency of Environment Protection and Forestry of the Kyrgyz Republic

8. WHAT IS ROLE OF THE INTERNATIONAL AGENCIES AND OTHER RELEVANT REGIONAL INITIATIVES PROMOTING IMPLEMENTATION OF COMMITMENTS ON CBD/POW IN THE COUNTRY

There are several projects in Kyrgyzstan in a sphere of rational use and conservation of the forests, which directly or indirectly help to implement commitments on CBD/POW. Below, description is provided:

- From 1994 up to now under support of the Swiss Bureau on Cooperation and Development and Inter-cooperation, the Kyrgyz-Swiss Programme on Forestry Support (KYRLES) is implemented. It activity is purposed to build conditions for various institutions and private individuals conducting activity in the forestry sector of Kyrgyzstan, conserve and protect forests and their biodiversity, increase the forest density and use forest resources on sustainable base.

- From 1997 to 2005, the GTZ Project "Biosphere Reserve Issyk-Kul" has being implemented – its activity was focused on conservation of cultural and natural legacy, development of the model and incentives for sustainable ecological and economical development of the region.

- From 2000 to 2006, the Central Asian Transboundary GEF Project on biodiversity conservation of the Western Tian Shan has being implemented. The project provided assistance to three states – Kazakhstan, Kyrgyzstan and Uzbekistan in their goal to conserve vulnerable and unique biological environment in the region.

- From 2001 to 2005, the EU Project on biodiversity conservation of the Western Tien Shan provided support to Kazakhstan, Kyrgyzstan and Uzbekistan in conservation of biodiversity and landscapes, establishing the transboundary park and social-economic development of the communities living within buffer area of protected areas.

- Since 2004, cooperation with FAO is developed. Under FAO's support, the projects were implemented in a sphere of legislation, namely "harmonization of the legislation on protected areas in Central Asia", "Legal framework to develop forestry and hunting". Under FAO's support, criteria and indicators of sustainable forestry management in the Central Asian region were adopted; the National Review on FOWECA and FRA was prepared.

- From 2004 to 2006, the Project "Introduction of sustainable multi-purpose management of the juniper forests in the south of Kyrgyzstan" was implemented under support of the European Union.

- Since 2004, the Kyrgyz-Norwegian Programme on Forestry and Environment Sector is being implemented. Its goal is to monitor the forest ecosystems of Kyrgyzstan. This programme was conducted in two directions:

  - Sector "Forest" – within this direction a mechanism will be developed in order to split two functions – controlling and economic activity – and attract private sector in forest density increase in the republic;

  - Sector "Environment" – within this direction, pilot sites will be prepared to carry out monitoring of the state of the forests in polluted areas.
  -

- Since 2005, cooperation with the National Forest Program Facility FAO was launched; the Project "Participatory based forestry management" was initiated, the beneficiary is "Inter-cooperation"; the Project "Dissemination of information on the forestry policy", the beneficiary is NGO "BIOM".

At present, issues regarding overlapping of activity implemented in a framework of the projects and monitoring of project efficiency are still open.

9. WHAT ARE CHANGES IN STATE OF ENVIRONMENT IN THE COUNTRY SINCE CBD/POW CAME INTO FORCE

Currently, there are no clear differences in changes in state of environment in the country since CBD/POW came into force.

Crisis happened in the country in transition period highlighted problems associated with biological diversity conservation. Based on some indications, the country got some features of underdeveloped country. Poverty level was reduced to 40,8% in 2003, although this reduction is noticed among the urban population, poverty level in rural areas is still high. 8 These changes have great impact on conservation of biological diversity in the country, especially the forest one. Mostly, it is explained by the country landscape. Many years unsystematic use of vegetation in the soviet and post-soviet periods have caused aridization of its territory and led to grass dominants change, various by typology vegetation communities, reduction of numbers, progressing depletion of regional biodiversity, less yield of forage, increase volume of weeds and poison plants, disturbing stability of natural ecosystems, their fully or partly transformations form the desert to alpine areas of the mountains. Non-controlled and excessive storage of plants and animals is increased, for example, Asian frog. Interest to this animal was increased because of people came from China. It causes threat of endanger of significant number of species of mammals, birds, fish and reptile.

For majority of natural ecosystems, especially nearby settlements, degradation is observed because of excessive grazing, logging, timbering, medical herbs gathering and unlimited poaching everywhere.

Unregulated livestock grazing is on the first place among the man-made factors. It touches both pasture and forest ecosystems and becomes cause of strengthening and growing frequency of above mentioned negative natural consequences. Such type impacts led to reduction of half productivity of pasture ecosystems and their partly or full destruction by 20-70% of total area depending on the region.

Forest ecosystems suffer from logging including poachers' logging. Spot violations in some places are combined with local violations. Logging sites might be sources of forest diseases. About 10-100 years are required to recover natural rehabilitation of forests suffered from illegal logging and grazing. Forest ecosystems continue to maintain high level of biodiversity in spite of reduced area. 1% of forest area is under logging, and 10% of forest area is used for grazing purposes. There is no accurate uniform inventory.

Further irrational forest use: unregulated livestock grazing, construction of roads, hydropower dams, mines and dwellings lead to aridization, desertification, deforestation, loss of biodiversity, less productivity/yield, less vegetation stability. Reduction and depletion of species composition of biota will bring to destructive functioning of the ecosystems including functions on air and water protection.

[8] *Informational bulletin – Kyrgyz Republic: food safety and poverty. The National Statistical Committee of the Kyrgyz Republic. №1/2004.*

Spruce forest in chon-kemin region,
by Vetoshkin Dmitry (BIOM)

High density of roads, especially those which do not connect settlements, leads to partition of the natural communities and their deformation as result of disappearing of some species within boundary of 500 meters and introduction of strange species.

Besides, to reduce unfavorable ecological situation following is done at present:

Continue based process of improvement of the legislation, institutional support, programme on poverty reduction, specific programmes and projects aimed to conserve biological diversity, such as forestry, conservation of biodiversity of the Western Tien-Shan, develop ECONET for long-term biodiversity conservation in eco-regions of Central Asia and others in order to increase ecological way of thinking – preconditions for better situation. At the same time, it was difficult to manage or stop trends on deterioration of state of some natural ecosystems and some species.

Nevertheless, positive trends are observed regarding extension of number and territories of the protected areas. Projects aimed to solve ecological problems, rehabilitate natural ecosystems and conserve some species are implemented within GEF/UNDP Small Grant Programme, Central Asian Transboundary GEF/WB Project, WWF Project "Gifts of the Earth" and others.

10. BASED ON INFORMATION AND DATA COLLECTED DURING THE SURVEY, PLEASE CONDUCT A COMPARATIVE ANALYSIS OF STATE OF THE FORESTS AND COMMUNITIES LIVING IN THE FORESTS PRIOR AND AFTER CBD/POW INITIATIVES

Following could be distinguished at the moment:

- In spite of official data on increased percentage of forest land of the country, the experts state out trend regarding reduction of areas covered by the forests. From the other hand, it is not only reduction of forest area; there is also deterioration of state of natural ecosystems;

- There is trend of weaken protection of forests – general protection ability of the forests is decreased because of delegation of protection functions in practice from leskhozes to local population. So, Functions of forest protection are actually lost;

- At present, there is still conflict related to access of the local population to natural wood and non-wood resources of the forest. This conflict is associated with definition of the entities, which will get benefit from resource use;

- Specialized measures to implement commitments of Kyrgyzstan on CBD/POW were not implemented, but initiatives on forest use and management are implemented currently, which directly influence on implementation of the country's commitments, such as:

    - Extension of the network of protection areas.

    - Implementation of initiatives supported by the Swiss Bureau of Cooperation and Development and Inter-cooperation (Forestry Support Programme (KYRLES)), FAO, GTZ "Biosphere Reserve Issyk-Kol", JUMP aimed to conserve forests and forestry biodiversity.

In this independent monitoring was participating the specialists as:

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