



UNECE



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Country statement

Tajikistan

**- Forest Resources Assessment
for Sustainable Forest Management -**

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Tajikistan

Forest resources assessment for rational forest usage in Tajikistan

a) *The brief general review of forest resources*

The common area of lands of state forest fund makes 1,8 million ha, only 25 % of them is engaged in forest plantings. The area covered by forests makes 410 thousand ha; 38 thousand ha of them are forest cultures created per last years. From the common area of forest fund taking place in conducting bodies of a forest facilities 1187,6 thousand ha, or about 70 % are fixed in long-term usage behind collective farms and state farms as pastures.

Table Distribution of the forest area and other forest lands

Land Categories	Area (1000 hectares)		
	1990	2000	2005
Forest	408	410	410
Other wooded land	142	142	142
Other land	13446.4	13444.4	13444.4
...of which with tree cover ¹⁾	106	102	102
Inland water bodies	259	259	259
TOTAL	14255,4	14255.4	14255.4

The distribution of lands of state forest fund by categories of lands looks as follows:

- ♦ Lands, covered with forests - 410 thousand ha; Forest cultures - 88 thousand ha; Not connected forest cultures - 27 thousand ha; Lands uncovered by forest - 299 thousand ha

From them:

- ♦ Sparse wood 173 thousand ha; gaps 126,1 thousand ha; Forest lands in total 740 thousand ha; Non forest lands 1060 thousand ha

From them:

- ♦ Ploughland - 6,6 thousand ha; Haymaking - 4,7 thousand ha; Pasture - 840 thousand ha; Other - 8,6 thousand ha.

In the republic trees of III-IV classes of bonitet prevail, with completeness 0,3-0,4 and average stock on 1 ha 35m³.

Among significant variety of vegetative communities there meet five various forests: broad-leaved and small-leaved forests, unique juniper forest forests, tugai (jungle) and Shibliak. The percentage of forests in the republic is a little more than 3 % and it occupies the last place among the Central Asian republics. In such situation the special responsibility is with bodies which are carrying out management of forests their protection and reproduction.

Broad-leaved forests it is communities with domination broad-leaved leave-falling mesophytic trees mesotympanitis and microtherm. An annual rhythm of this type of vegetation share for two periods: long years summer vegetation with several aspects and winter rest. There are submitted by *Juglans regia*, *Malus sieversii*, *Malus sieversii* forest, *Acer Regelii* and *A. turkestanicus* forest and *P1atanus orientalis* forest in Tajikistan. The basic massive of broad-leaved forests are located from Gissar up to Alay mountains, on slopes mountain systems Peter I, Vahsh, Hazratishoh and Darvaz heights of 1000-2300 m.

There are small-leaved forests with domination of small-leaved leave-falling mesophytic, microtherm trees. These forests founded on flood-land of all mountain rivers, on all mountains from height about 1500 m and up to the top border of a forest are distributed. Depending on absolute height small-leaved forests are submitted that by *Betula*, *Populus*, *Hippophae rhamnoides*, *Fraxinus* and *Salix* forests. Between groves of trees are usual a stain of bushes and meadows of various character.

The tugai (jungle) is a combination impassable alluvial lands vegetation and jungle with powerful reed (*Phragmites*) thickets and lakes and bayous. They represent a unique complex of wildlife of dry subtropics zone. In beginning XIX of century the area flood plain and tugai come to approximately one million, but now come to only 120 thousand ha, i.e. for hundred years the tugai area was reduced more than 8 times. The tugai vegetation is submitted: *Phragmites*, *Saccharum*, *Eriophorum*, *Typha*, *Imperata* and some other species: *Carex*, *Butomus*, *Scirpus*, *Calamagrostis*. On strongly salted soils together with *Phragmites* grows drought resistance and salt resistance species - *Aeluropus*, *Glycyrrhiza*. In that place where the ground water level is on depth of 1-2 m a tree layer grow *Populus* and *Elagnus* with shrub *Tamarix*, *Lycium*, *Halostachys* etc.

Shibliak is communities of mesophytic and xerophytic mesotherm leave-falling low trees and the bushes forming rarefied plantings. A grassy cover of these communities is a ephemeral or xerophyte character. The vegetation Shibliak is adapted, to transferring of long summer years with a drought and brief winter rest. In Tajikistan in forest cover of Shibliak the *Amygdalus bucharica*, *Pistacia vera*, *Calophaca grandiflora*, *Cercis griffithii*, *Rhus coriaria*, *Zizyphus jujube*, etc. There are basically plants of ephemeral character in a grassy circle.

Juniperus forests communities with domination of coniferous cryophylic and microtherm, mesoxerophyte and xerophytic, sometimes xeromesophyte trees, and elfin wood. *Juniperus* in Tajikistan it is submitted by several species: *Juniperus sibirica*, *J.turkestanica*, *J. Seravschanica*, *J.semiglobosa*, *J.schugnanica*. All this trees usually undersized, reach occasionally 15 m, but is usually lower, on the top limit form the elfin wood. *Juniperus* forests and juniper elfin wood have the big antierosion value; protect slopes from washout and sliding. Junipers are drought-resistant and light demanders, their plantings usual are rarefied, and close plantings meet seldom.

The forests of Tajikistan concern to the 1st category, i.e. all of them carry out nature protection and soils protection function and their felling is forbidden. Only sanitary felling is authorized and annually the Tajik forestry industrial association prepares 6940 m³ of fire forest.

The structure of prevailing forest forming breeds is consist from: Juniper – *Juniperus* L.; Pistachio – *Pistacia* L.; Maple – *Acer* L.; Persian walnut – *Juglans regia*; Poplar/Aspen/Cottonwood– *Populus* L.; Birch – *Betula* L.; Almond – *Amygdalus* L.; Willow – *Salix* L.; Elm – *Ulmus* L.; Myrobalan plum – *Prunus* L.

b) Forests possession and forest users

In 2004 there was organized State Committee for Environment Protection and Forestry of the Republic of Tajikistan (SCEPFRT) on a base of the Ministry for Nature Protection and Forestry Production Association. All Tajikistan forests are state. By the guarantor to preservation, restoration, expansion and rational their use it is assigned on SCEPFRT. The most part of forests are in conducting of Forestry and Hunting Agency (FHA), an insignificant part enter into conducting collective farms. However the control over their condition and rational use it is assigned on SCEPFRT . Structure of SCEPFRT includes 4 area protections, 2 National parks, 13 reserves, 148 nature sanctuaries and others. Besides, there are

following institutions under State Committee: inspection on fauna and flora protection, Tajik Research Forestry Institute (TRFI), FHA including 52 forestry enterprises.

The protection of a nature and rational use of natural environment is adjusted by the Constitution of the republic, according to which the land and entrails of the earth, air space, the animal and vegetative world and other natural resources are the extremely property of the state and it guarantees their effective use in the interests of the people.

One of the major acts is the law of the Republic of Tajikistan "About nature protection" (accepted in 1993). The present law in a complex with organizational, legal, economic and educational measures is called to promote formation and strengthening ecological law and order, protection of natural environment in the interests of the present and future generation and maintenance of ecological safety on the territory of the Republic of Tajikistan.

Majlisi Oli (Parlament) of the Republic of Tajikistan in 1993 accepted the Forest Code of the Republic of Tajikistan, the basic purpose of which is the preservation of forest fund of the Republic, and also protection and rational use of lands, waters, animal and vegetative world of a forest, taking place in its territory.

c) Protective and defensive

There are 4 protected woodlands, 13 reserves, 2 national parks in the republic. Protected woodlands "Tigrovaja Balka", Romit, Dashti Jum and Zorkul were created for protection unique nature mountain territory.

The Tajik and Sherkent state national parks were created for protection unique as far as the nature protection and aesthetic of a mountain landscape are concerned, at simultaneous adjustable recreational use and carry out major cultural-educational functions for broad mass of the population.

Under the supervision of FHA there are 13 nature reservations which carry out various functions and cover almost all natural-landscape zones of the republic.

The monuments of a nature taken under state protection are represented by various unique objects of a nature occupying insignificant areas. In the republic now the status of the Monument of nature is given to 162 objects

The first jobs on forest breeding were begun in 1882. Mass forest breeding in timber enterprises of the republic originates since 1947. Then there are not any obstacles for forest breeding, the lands of state forest fund till 1966 were not fixed in long-term usage with collective farms to state farms. Annually forest restoration is spent on the area up to 1990 - 4300 ha, and since 1994 – 1900 ha , 1999 – 2900 and 2004 – 3200 ha.

d) A stock and its use

The analysis of the received official data from FHA shows, that over the period 1990 to 2004 volumes of timber felled illegally increased by more then two times, from 3000 to 6,700 m³. At the present the general stock of forests make 5.30 million cubic meters.

Wood preparation in forests is carried out by way of cutting of intermediate using depending on a condition and quality of forests within the limits of the established plans, approximately 6700 m³. Also on the area of 3400 he the sanitary selective cutting is annually made. Wood

basically is made for children's and school organizations, hospitals, boarding schools and others state organizations.

In the country do not prepare industrial forest.

FPA basically harvest products of collateral using, including: subtropical - 22.4 t.; walnut - 43.5; pistachio 40.59; almonds bitter - 1.15; almonds sweet 1.9; sea-buckthorn berries - 2.7; medicinal grasses - 14.9 t, etc.

e) Planning of forest national management

The information concerning to national forest assessment to be prepared by FHA, which goes from regional timber enterprises by means of filling a special forms where are specified the general area of forests, their conditions, quantity of fires, infringements and other parameters and is simultaneously transferred in regional committees on statistics. After the analysis of all received data from all forest enterprises FHA transfers the information in State Committee of Statistic.

Forester collects the data on forest conditions and experts working in the above mentioned forest enterprise with attraction of experts from FHA and other forest enterprises. There is not equipment for data gathering and analyzing. There are only few computers in FHA system. Forest enterprises use equipment of 1992 year.

In the country there are no opportunity of gathering and processing of the information as timber enterprises are not computerized and are not present a uniform information network.

Projects according to national and international forest resources assessment in the country are absent. Support on the part of the international organizations in development of forestry is few. Only in some international projects there are separate elements of forestry.

All forestry production works is financed by the state.

f) Sustainable forestry management

The national plan of forestry development in Tajikistan is absent. However, now SCEPFRT develops such a Plan of forestry development. Beside the given question has found the reflection in the Plan for development of agriculture and in the Document Strategy on poverty reduction.

Among numerous national criteria and parameters of sustainable management in the country it is necessary to allocate the following parameters: ways of reduction of anthropogenous loading on forests, degree of contamination illnesses, degrees reduction of completeness and the area of forests and methods of restoration of large forests, their area, viability of the planted trees, equipment of financially technical base, ways of rise of forest productivity and etc. On all these parameters timber enterprises should submit report to FHA. But, unfortunately, many these parameters also now are not taken into account and reporting on them is absent.

At the present many timber enterprises of the country have no certificates on the land.

We hope this report about Forest resources assessment in Tajikistan will be used with regard to the regional and global level of forest resources assessment. Unfortunately, we don't have any information in terms of numbers and figures according the criteria of Sustainable Forest Management (SFM).

g) Gathering and distribution of the information on FRA

Due to absence of good technical base and shortage of the finance, now the forestry production organizations of Tajikistan (FHA, TRFI, TNP) have no an opportunity completely to satisfy information needs, both inside the country, and behind its limits. Between the organizations there is a close communication and existing information is distributed, basically in a paper format, among all interested the organizations. The unique international organization which has become interested to the given work this FAO due to which it has been prepared country report on FRA.

The main problem in this area of shortage of technical equipment for gathering of information, absence of ways for distribution of having information, inaccessibility to wide layers the population of the existing data on various questions FRA and etc.

h) The list of questions and the problems demanding the decision

The basic problems of gathering, processing, exchange, storage and distribution of the information on forestry resources are:

- Absence of a solid data about forest resources in the country;
- Absence a database by various criteria and parameters of forest resources;
- Very weak monitoring of forest resources;
- Weak financially technical base of timber enterprises;
- Absence of a uniform network on gathering and processing of the received information;
- Out-of-date cartographical materials;
- Weak knowledge of local population of value of forest resources;

For the decision of the set forth above problems it is necessary technical, financial, advisory, training help on the part of international for the organization.

Preceding from existing problems it is necessary to solve the following problems:

- to improve the structure of forestry management by integration of timber enterprises, thus to increase a role of forest wardens in forestry management;
- to increase financial assignments from the state budget by a bookmark of forests and plantations;
- to harmonize the forest code with existing legislatively – statutory acts and the international requirements;
- to transfer the lands of the state forest fund from a category of long-term using in a category free;
- to develop the long-term multi-purpose program on development of forestry;
- it is necessary to prepare the highly skilled staff in the field of forestry, as in high schools of the country, and abroad;
- to update and equip technical base of timber enterprises with the new equipment and techniques;
- to carry out on a regular basis explanatory work among local population, it is especial among schoolboys, about value of forests in a life of a society and an environment;
- to implement regular seminars (one-day) among local population about the statutory acts existing legislatively concerning to the forestry;
- to publish booklets, prospectuses and brochures in the Tajik language about forests for local communities;