



UNECE



Workshop

**“Capacity Building in Sharing Forest and
Market Information”**

24 – 28 October 2005, Prague and Křtiny, Czech Republic

Country statement

Armenia

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

Mr. ANDRANIK GHULIJANYAN

Head of Forest Research Experimental Center

Forest Experimental Center

Baghramyan 3

AM - 375002 Jerevan

Armenia

Estimation of wood resources for inexhaustible forest management in Armenia

1. The brief general review on wood resources

Armenia is one of the least wood covered countries in the world.

According to data of the wood fund monitoring dated 1993, the general area of woods of the republic makes 459 thousand ha, including proper wood area of 334 thousand ha, so wood land makes 11.2 % of the total territory of Armenia.

Zone of wood distribution is from 550 up to 2500 m. above the sea level. Woods basically are located on slopes 25-30° that determines directions of forest management. Woods of Armenia carry out basically nature protection functions.

As to the territory, woods of the republic are allocated extremely non-uniformly so 62 % of woods grow in the northeast of the country, 36 % in the southeast, while in the central part with concentration of about 50 % of the population of the country, woods make only 2 %.

According to the data of the wood fund monitoring of 1993, the general stock of wood stands makes 41.74 million m³, average completeness of woods - 0.53, average bonitet - III-8, middle age - 99, the current growth of 1.3 m³ per ha. Average annual growth makes 434 thousand m³. Average stock is 125 m³ per ha.

Woods of Armenia are rich in their diversity. About 260 wood and shrub species grow here, of which the basic wood forming species are oak, beech and hornbeam. The latter 3 occupy altogether about 80 % forest areas and stand for 97 % of the general stocks.

As to age structure woods demonstrate great heterogeneity. Young growths occupy only 11 % of wood lands, while ripe and overripe stands occupy 27 % of wood lands and correspond to 33 % of the general stocks.

The territory of Armenia makes 29.8 thousand sq. m, 160 000 ha of which are covered with water.

Before the new wood legislation of Armenia was adopted, wood protection categories were distributed as follows.

- Protective woods which occupied 257 thousand ha or 56 % of the total wood fund.
- Woods of social value - 106 thousand ha or 23.1 % of the total wood fund.
- Woods of specific purpose value - 96 thousand ha or 20.9 % of the total wood fund.

In October, 2005 the parliament of the country has accepted the new wood legislation which has established the following division of woods into categories:

Woods of protective value as which are ranked:

- Water objects, water-security wood zones
- Woods on slopes of 300 m. and higher (in the former legislation this referred to slopes of 350 m. or higher)
- Woods carrying out antierosion functions
- Strips of 200 m. wide at the top and bottom borders of a wood

Woods of specific purpose value:

- Woods included in especially protected zones
- City and suburban woods
- Recreational and health improving woods
- Frontier woods of defensive value
- Woods of historical and scientific value
- Woods protecting sanitary zones

In woods of specific purpose value some kinds of forest use, which do not correspond to their legislative status are limited or forbidden. .

Industrial woods are called to provide continuous wood production. Here belong woods that are not registered among woods of specific and protective value.

According to the submitted classification, experts of Armenia will have to take into account distribution of separate wood categories and areas, occupied with them.

It is clear that the new wood legislation of Armenia will change significantly the total estimation of wood stocks of 2005.

2. Wood possession and wood holdings

All the woods of Armenia are state-owned. Till 1991 about 55 thousand ha of woodland was managed by collective farms and state farms. Here mainly belong the woods which grow around settlements. As a result of wrong forestry management and irregular felling, woods degraded and represented valueless, rear wood stands of low density.

In 1991 all the collective- and state-farm woods were included in the structure of the integral wood fund.

According to the new wood legislation of Armenia, state woods and wood lands are not subject to withdrawal of any communities, legal persons and citizens.

At the same time it is established, that a wood grown on the lands belonging to communities, legal persons and citizens is considered their property.

The new wood legislation establishes the right and duties of private proprietors of wood stands.

Rights are as follows:

They establish the rate for forest usage, conditions, terms and the size of the rent pay.

Duties include:

- Wood protection and guarding
- Order and realization of management plans
- Increase in fertility and target use of the wood lands
- Tending, bookmark and restoration of woods on wood lands.

3. Protective and protected wood lands

The network of especially protected natural zones includes 2 national parks, 4 national reserves, and 22 state game reserves. Their total area makes about 311 thousand ha (including also 125 300 ha of the lake Sevan) and occupies 10 % of the territory of the country. As to land areas the protected zones make about 6 % of the territory of the country.

At present the wood fund of the republic is managed by two ministries: the Ministry of Wildlife Protection and the Ministry of Agriculture.

So the wood lands of the national parks and national reserves are in competence of the Ministry of Wildlife Protection, whereas the basic wood areas and the largest part of wood nurseries are in competence of the Ministry of Agriculture.

The programs on inventory and certification of natural monuments are also in progress. This enables to make up the generalized list of types of natural monuments which are to be authorized by the government. It in its turn assures that concrete actions for their protection will be stipulated.

The plant life of Armenia is rich with more than 130 kinds of wild fruits and berries, the occupied area of which is estimated at 10 000 ha or 3.5 % of woodlands. The basic kinds of fruiters are walnut, wood pear, apple-tree and dogwood.

There are also a lot of fruit and berry bushes. Most of them are of high nutrition value. They are ecologically clean and are high-quality raw material for canning manufacture. Some of herbs are used in medicine.

The most part of natural woods, occupying 27 % of the wood fund were badly damaged as a result of illegal large-scale felling during the last decade. They need restoring. According to the report of FRA dated 2001, virgin woods, the territory of which reached 51.2 thousand ha in 1993, now only make 18 thousand ha. These woods are located on abrupt slopes and are remote from settlements.

Wood stands occupied 50.2 thousand ha in 1993. 13.4 thousand ha of them were young growths which did not transfer to afforested land yet. The most part of them are destroyed due to lack of tending and bad protection . For the last 13 years only about 1000 ha of wood species have been planted and their condition is far from satisfactory.

4. Stocks and their use

According to the data of the wood fund monitoring (1993) the whole stock of wood in Armenia was estimated at 41.74 million m³.

For last 12 years about 75 % of wood territories have undergone irregular illegal felling which exceeds the amount of planned felling more than in 10 times. Therefore quantitative and qualitative changes of the wood fund have taken place. The stock and specific structure of wood has changed.

Only in 1993-95 the damage of 1 million m³ of forest wood was caused. In spite of the fact that within the next years the volume of illegal felling decreased, at present it again exceeds all the limits.

In 2002-2004 the World Bank supported financially researches on illegal felling. As a result it was stated, that only in 2003 847 thousand m³ of wood was illegally cut. For the period from 1993 to 01.01.2005 only 63 thousand m³ of wood was properly registered. In fact, the general amount of the cut wood for the specified period made 1120 thousand m³.

According to the FRA report (2005) the general stock of wood for 01.01.2005 is estimated at 36.3 million m³, including the general stock of other grounds covered with wood vegetation which makes 70.0 thousand m³.

At present a great amount of illegal felling seriously endangers the woods of Armenia. The problem consists in the fact that about 230 local communities cut wood located not far from settlements. This felling results in structural changes in given zones.

As a result of the specified felling oak and beechen stands have been destructed. It has caused an undesirable change of species and area of hornbeam stands has increased. /There is no any concrete data on changes in the wood fund. /

The system forestry employs about 2000 engineering technical workers and employees: 400 people in manufacture of products, 1200 people of attending personnel and 400 person are engaged in other forestry works (FRA-2005).

5. Planning of national forest management

In Armenia works on inventory and monitoring of woods were carried out in 1929-30 on some areas only. Since 1950 the plan of forest management is developed every 10 years, and once in 5 years the state account of the wood fund is carried out.

Since 1992 the specified works were not carried out for the lack of financing and absence of local experts. Works on development of inventory and plans on forestry management have been restored in 2000.

Until recently management and accounting planning in forestry was carried out on the basis of the Soviet standards.

Now the Program of Institutional Assistance financed by SIDA has developed the new program for Armenia. Its application will have positive influence on the development of forestry of the country.

Structural changes are currently in process in Armenia.

Recently the decree of the government has founded official Department of Forest Monitoring. As a result it will be possible to collect data and to carry out analyses and forecasts.

I have estimated all the data concerning forestry (FRA-2005) as correspondent.

6. Steady forest management (SFM)

At present plans of forest management have been developed at 5 forestry enterprises of the republic, which account for 24 % of the total wood land.

In 2005-2006, plans of forest management will be worked out in 5 more forestry enterprises (about 125 thousand ha or 27 % of the wood land) and in 2 national parks (about 48 thousand ha - 10.5 % of the wood land). This work will be financed on the part of the World Bank within the program of natural resources management and decrease in poverty. Besides 2 forestry enterprises will be financed from the state budget of the country. The budget program provides for complete inventory, account and managements plans in 3-4 years.

The new wood legislation of Armenia has introduced certain changes in the criteria of estimation of wood resources, in particular in the characteristic of wood.

In Armenia there are no certificated wood stands though in 2000 certain actions towards it were carried out. According to the plan of Wood Trustee Council and also to the programs of national standards management and poverty decrease it is stipulated to certificate forests in one forestry enterprise following the above mentioned scheme in 2006.

7. The list of questions and problems which need solving

In 2005 the government of Armenia has ratified the national program where the special emphasis is laid on processing of the wood data and greater awareness and publicity of the society

In particular it provides for:

- Creation of a uniform information network
- Creation of scientific control service in the sphere of forestry and wood awareness
- Creation of account, monitoring and cadastre system
- Realization of the forest program on the international scale
- Involvement of forestry in the process of the international integration
- Educational courses on natural study, with special attention to the role of proper forest use for well-being of local communities.