

Turkey Forest with Respect to Sustainability

İbrahim Fevzi ŞAHİN

Atatürk University, Turkey
ifevzi@atauni.edu.tr

Ramazan SEVER

Atatürk University, Turkey
rsever@atauni.edu.tr

Halil KOCA

Atatürk University, Turkey
hkoca@atauni.edu.tr

Alperen KAYSERİLİ

Atatürk University, Turkey
alperenkayserili@atauni.edu.tr

Namık Tanfer ALTAŞ

Atatürk University, Turkey
ntanfer@atauni.edu.tr

Abstract: As a natural part of global ecosystem, forests have been destroyed continuously despite sustainable principles. In Turkey, forestation has started as utility forestation and production forestation just as everywhere in the world and later on the type of forestation suiting nature as well as multifunctional forestation has been preferred. At present, according to the decision taken at United Nations Environment and Development Conference (1992) the principles of sustainability have come to the fore. The main objective here is to provide means for those settling in rural areas to make their living without destroying forest and within the limits of protecting nature and maintaining development. In the light of this, forest in Turkey are to be sustained in spite of lack of application, destroying forest to make fields, irregular grazing, unlawful cutting, improper use of land and biological threats. It is inevitable to put in practice regular production techniques and to organize peasant-forest relation in order to determine the reproductivity capacity and limitations of Turkey forest, which have rare natural, old forests environment of our country.

Key Words: Turkey, Forest, Sustainability, Environment

Introduction

The total amount of forested areas in the world is approximately 4.3 billion hectares according to the information about the forests of the world, published by the Food and Agriculture Organization of the United Nations (FAO). The ratio of the forested areas to other areas is 32.3%. The distribution of the forests over the world is unbalanced and only 20% of the forests are fertile. The forested areas, which shrank because of a variety of reasons, are facing similar problems. According to the FAO and the United Nations Environment Programme (UNEP), 17.5 million hectares of land is deforested every year beginning from 1990's. However, only 1 hectare of land is forested for each 10 hectares of land deforested.

This situation seen all over the world is also the case for Turkey. According to historical data, in the last 4000 years Anatolia has been largely deforested because of excess and improper utilization of forests, land clearing, wars, forest fires and improper grazing, and the quality of the forests has been partially impaired. What causes people to behave so irresponsibly while it is known that lack of forest leads to economic constriction and ecological imbalance? It is not difficult to answer this question. Forests are natural and they mostly grow on their own without requiring any human labour. It is easy to access forests and trees are used in many fields. Therefore, they are sometimes used as a source of revenue and demolished by illegal and excess cuts. At the same time, grazing animals in forests and turning these areas into agricultural lands inconveniently also destroy forests.

Geographical Position and Forests of Turkey

Turkey is located in the Northern Hemisphere at the junction of Europe and Asia. The European side is called Thrace and the Asian part is known as Anatolia. It shares boundaries with Greece, Bulgaria, Georgia, Armenia, Azerbaijan, Iran, Iraq and Syria with a total length of 2753 km. It holds a coastal length of 8333 km. This coastal zone includes the shores of Black Sea, The Sea of Marmara, Aegean Sea, Mediterranean Sea and the passages of Bosphorus and Dardanelles (Figure 1). It has a total area of 78 million hectares of which 20,8 million hectares are designated as forest land. The topography is very rough and steep.



Figure 1. Location map of Turkey

Turkey is a country which cannot be deemed as poor in plant diversity and forested lands. Total forested area of our country covers 20.7 million hectares. 10 million hectares of these forests are highly fertile (Table 1). In other words, 48% of our forests are fertile. Our fertile forests cover 12.7% of the area of our country. This means 0.14 hectares of fertile forest per capita. Especially the Black Sea Region is in good condition with regards to forests. However, the Central Anatolia and the South-eastern Anatolia Regions are poor in forests. The forested areas in these two regions are equal to only 10% of all the other forests in the country.

Table 1: Forest resources of Turkey (Turkey General Directorate of Forest).

Forest Area	High Forest (ha)	Coppice (ha)	Total (ha)	%
Productive	8 237 753	1 789 815	10 027 568	48,3
Degraded	6 180 587	4 555 093	10 735 680	51,7
TOTAL	14 418 340	6 344 908	20 763 248	100,0

In 1950's, 25% of the world was covered with fertile forests. This ratio fell to 20% in 1970's. Unless effective measures are taken, the ratio of the fertile forests in the world will be only 14% towards 2020's.

Forest with Respect to Sustainability

Forests, which are the capital of the global ecosystem, are rapidly destroyed despite the sustainable forestry principles. As it is the case all over the world, forest management began in our country began as exploitation forestry and production forestry; and then multifunction forestry and natural forestry began to be applied. Today, they are trying to be applied according to the decisions taken at the United Nations Conference

on Environment and Development (1992) adhering to sustainability. However, there is not much success in practice because of different reasons.

Preserving, maintaining and improving the forest, making them fertile and cultivating, and using them without preventing the future generations' development created the concept of sustainable forestry. However, this concept could not go beyond being a concept. In addition, this concept of sustainable forestry is the reason for all of the forestry sciences, especially the Forest Management Sciences to emerge (Asan 1995:17). ASAN also asserts that, this concept has been applied in all planning operations since 1700's. In the forest management, what the concept is or when it is used is not important. What is important is its purpose. The common purpose should be developing the villagers [1] living in or next to forests with rational plans and projects which are based on appropriate examinations, without exhausting the natural supplies in question and getting into the dilemma of preserving the environment or developing. In other words, the evolution of economical system and environmental system should be maintained together (Tekeli 2000:10).

Turkey's situation is relatively good in the quantity of forests it has. However, we do not have enough fertile forests. Although certain efforts are made to preserve and improve forests, forest management cannot be efficient because of socio-economic problems. This reduces the quality and the quantity of our forests. For example, usage of the forests in our country as pastures for animals, illegal cuts and land clearing are the major reasons for hazards (Figure 1).



Figure 1: Turkey forests to be destroyed for various reasons.

The regulations that govern forestry should also be examined in order to correctly understand the importance of sustainability in the sector of forestry in Turkey. Turkish Constitution is different from the constitutions of many other countries in that, it includes provisions about forestry. In the process from 1937, when regular forestry studies began, until 1960, when the provisions about forestry were first included in the constitution, many political activities were held, which caused hazards to forests. That is why, Turkish Constitution of 1961 included forestry.

Turkish Constitution of 1982 also included provisions about forestry. However, there are remarkable expressions about the subject. One of the provisions of the article is a commentary about sustainability peculiar to Turkey. Whereas this provision indicates that the borders of forests cannot be shrunk, it makes it possible to exclude some forested lands from forest regime. This provision, which is included in the Article 2 of the Constitution, is the base for the applications called 2-B and enforced according to the Provision B of Article 2 of the Law of the Jungle no: 6831. The sustainability of the parts of forests that are exposed to the 2-B application becomes eternally impossible. This situation seems to be a ground for many problems in the future. Hazards to forests by the enlargement of cities and tourism investments result from the 2-B application.

Firstly, a regional planning based on sustainability should be designed. It should be considered in every stage of forestry that there is an organic link between forests and the villagers living in forested lands. That is why, a public strategy should be followed which will enable social plan integration necessary for improving the level of education and awareness of the villagers who live in the countryside and have the economic structure principally based on natural sources. At the beginning, forests in the whole country should be divided into parts of a certain size and they should be given to those villagers. Thus, passage to forest management should be achieved and legal regulations should be issued for this purpose. Activities like maintenance, tree planting, preserving and management should be carried out by the villagers under the supervision and control of experts from Forest Managements. When such a legal regulation is applied, hazards to forests will decrease and the

[1] According to the results of the census in 2000, about 7.544.000 people live in 20.314 forest villages (7.302 in forests, 13.012 next to forests), and they form the 11% of the total population and nearly half of the rural population.

villagers' level of welfare will improve undoubtedly. However, this precaution should not be enough, and solutions for different conditions of different regions should be provided.

The basic factor that draws the villagers living in forested areas to forests is their low standard of life in socio-economic terms. That is why, the level of life standard of the villagers, whose economic problems gradually increase, should be improved and it should be aimed that they will have high level of education, natural and environmental consciousness. Social forestry should increase countrywide in order to decrease the villagers' pressure on the forests. The participation of the public should absolutely be ensured in this process. While announcing the aims and studies of Forest Area Managements, General Directorate of A forestation, Or-Köy (General Directorate of Forest-Village Relations), and Directorate of National Parks, Game and Wildlife with various activities, participatory plans and projects that consider socio-cultural and economic standards of villagers should be applied. Otherwise, the inclination towards forests will continue. On the one hand, minimum benefits will be obtained like cutting trees in the forests and selling them, land clearing and illegal provision of trees as fuel and raw material. On the other hand, this inclination will create problems which will obstruct sustainability of forests and spoil ecological systems. Moreover, as a result of spoiling ecological systems, irreparable problems will arise such as the extinction of endemic plants in the forest (Sever 2002:95-97).

In order to manage the forests of Turkey within the framework of sustainability, completing the management studies is one of the works to be primarily done. Awareness of the socio-economic conditions of the villagers in forested areas is possible by implementing improvements. The organic link between forests and the villagers living in forested lands is the most important think that should be considered in every stage of forestry. However, it is quite difficult to say that it is followed.

Turkey has acceded to some international conventions like Convention on Biological Diversity, Ministerial Conference on the Protection of Forests in Europe, United Nations Forum on Forests. However, it cannot always manage to meet the requirements of those conventions. This usually results from conflicts between the authorities of local governments and national government, and inadequate representation of communities of interest and decision-makers. This complexity of authority should absolutely be removed and the exact limits of authorities should be determined.

Conclusion

Forests should be preserved according to the principle of sustainable forestry and should be improved. Their fertility should be increased and be cultivated constantly. They should be used without preventing the future generations' development. Accordingly, the forests in our country should be managed including the above suggestions, according to the principles of sustainable forestry.

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