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## The Ecological and Economical Performances in the Forested Area – a Need for the Future

**Authors:** **Florina BRAN**, Faculty of Agro-Food and Environmental Economics Bucharest Academy of Economic Studies, Romania, florinabran@yahoo.com; **Ioana Maria GHIDIU-BÎTA**, Bucharest Academy of Economic Studies, Romania, i\_ghidiu@yahoo.com; **Cristina CIOVICA**, Bucharest Academy of Economic Studies, Romania, chi\_che2002@yahoo.com

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*The forests are indispensable for the natural balance on Earth. Without the existence of the forest the life is not possible because this ecosystem provides many goods and services. The many clear cut forest surfaces have led to the lack of balance of ecosystems causing risks for the environment. The globalization promotes multinational companies, which have an important role in the exploitation of the forest. Because of the many advantages, the forest must be protected from the bad influence of the globalization, a thing possible due to the fact that the world is heading to a new economic order. The paper presents the situation of the forests in Romania for the 2005-2007.*

**Keywords:** forest, globalization, human pressure, forested area

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### Introduction

The forest is the most important natural ecosystem. In the forest there can be found many animal and plant species that can bring a lot of benefits materialized in products and services of the forest. For many centuries the forests have been reduced considerably in order to create harvested fields

and areas for animal breeding, changing the natural landscapes and producing risks that can generate ecological lacks of balance.

The globalization is a phenomenon that influenced many sectors of the economic activity along with the forestry. The globalization of the economies and the appearance of a powerful sector of multinational companies induce major changes in the geographical localization, the type and the intensity in the forest's use, a small number of multinational companies being in control of the exploitation, processing and commercialization operations for the forest's goods. Thus is necessary to appear a new economic order that can solve the problems of the forest's over-exploitation.

## **The forest's economy and the demands of the third millennium**

The forest has a great importance for the human life, being in the same time a natural regenerating resource of wood and other vegetal and animal products, and also an irreplaceable part for the living surroundings. At first, the forest was seen only as a source of the production of material goods, but in the first decades of the XX-th century takes place a rediscovery of the forest [1].

### **The benefits of the forest**

Revaluating the forest sector based on the variety of the forest's products and ecological services at a local and regional-global scale, there can be obtained many kinds of contribution, which appear under the form of forest's benefits:

- the extraction and sale, that generate decorative materials, food (mushrooms, fruits, meat, fish, medicinal herbs) and recreational sports;
- the extraction and sale of wood, from which are being obtained timber, firewood and wood for other uses;
- other uses, that are the recreation, research and education;
- the benefits for the community, which are the landscape value and the historical value;
- the environmental services that include maintaining the hydrological systems, the control of the erosion, maintaining the

biodiversity, the climate adjustment and the reduction of the air pollution.

### **The ecosystem services provided by the forest**

The ecological forest's services are rare resources for accomplishing the desiderates of the sustainable development in the forest economy:

- the water protection function consists in the forest's characteristic of diminishing the leakage of surface waters, enhancing the retail of the subsoil water and ensuring the water flows a constant retail and a high clearness;
- the terrains and soils protection function consists in the forest's feature of attenuation or elimination of the soils erosion process;
- the climatic factors protection and the amelioration of the atmosphere's quality function consists in the forest's characteristic of having a positive influence over the local climate;
- the recreation function represents the forest's feature of protecting and providing the health, ensuring a high level of human physical state, recovering the strengths and the human work capacity [2];
- the conservation of the biodiversity which ensures the ecosystems continuity;
- the forests and the food security: maintaining the forest ecosystem ensures the food necessary through products, incomes, wood, supply of products especially in the crisis periods, the long drought periods and the rare natural resources for agriculture.

## **The human pressure on the forested area**

### **Causes and effects of forest loss**

The main factors that contribute to the diminishing of the forested area are [3]:

- the forest's clearing for the needs of the agricultural surfaces, fuel and constructions materials;
- the atmospheric pollution and especially the acid rains;
- the capitalization of the hydro-energy's potential for obtaining the electric energy, considered "clean" transforms large forest surfaces into aquatic ecosystems through the accumulations behind the hydro-electric station's barrages;

- droughts.

The main consequences of the forest's clearing are:

- the annulment of the forest's protection functions;
- changing the landscapes, by cuttings, leads to the diminution of its esthetic value and thus of the area's tourist's potential;
- the change in the local climatic conditions;
- through its diversity, the forest is a huge reservoir of genetic information;
- setting the forest on fire;
- high economic losses.

### **State of forest area**

At the beginning of the XX-th century, the forest surface of the Earth was of 5 billion hectares [5], and the remained forested area was in 2011 of 4 billion hectares [4]. After UNEP, about 32,9 million square kilometres of forest are affected in the world, most of them being in the stage of degraded vegetation due to the excessive grazing. From the total Earth's surface only 10% represent lands under crop, while 21% is destined to grazing, 28,5% represents forests and forested areas, and 24% refers to "other types of land".

The public forested area in Romania consists in the total state's forested surfaces, administrated by the National Forests Administration. This was in 2011 a total surface of 6,200 million hectares, which is about 27,3 % from the total surface of the country [5], producing a commercial volume of 13 million cubic meters per year [6].

### **Forestry policy and strategy**

The forest's conservation involves activities for insuring the long term protection of its services for the environment. In Europe and North America most of the forests are administrated more efficiently than they are in the countries in course of development, where the formal administration it is bad represented.

The desertification was the first environmental problem that affected the entire surface of the Earth, being admitted at the Desertification Problems Conference of the United Nations at Nairobi, in

1977. The Environmental Protection Program launched by ONU (UNEP) coordinates the efforts of solving this problem.

Romania has a large experience with the control of the desertification, being in great need of interventions in the south, south-east, east and center of the country and of financial resources. The participation at the Convention for Fighting the Desertification is a big step for the progress of the Romanian economy, the conservation of the resources of the environment and the integration in the international community. According to the PHARE project for Rural Development for Romania – The Green Card has been created a model of strategy for sustainable development.

In Romania's case, stopping the desertification is made with the collaboration of the specialists in forestry, agriculture and the environmental protection, giving much attention to co-interested the local population. The international or local funds show the authority's interest for solving the forest's clearing lacks of balance. The environmental protection is established in Romania through a series of normative acts that creates the judicial frame necessary for the protection of the environmental factors, of the consumers and for following the principals of the sustainable development.

In the context of the globalization a limited number of multinational companies have an increasing control over the forest's exploitation. The multinational companies have a big role in the forest's destruction and, in consequence, in leading to local population's poverty, acting in the following way:

- operating on a larger scale than the local companies, having the technologic capacity and the capital for opening exploitations on isolated forest surfaces;
- the multinational's impact is being enhanced by the globalization, which allows the wooden products demand on the global market to prevail over the locals needs and the necessity for the forest's conservation, this causing the fate of the local people;
- the foreign companies "extract" the profits from the forest's exploitation in that country, and the locals or the local economy can't beneficiate from them;
- most of the multinational companies don't show any interest for the forest's future, and the equipment used for the exploitation

(including the roads, the factories, etc.) is being let to deteriorate when its wood or its mineral resources have been exhausted [7].

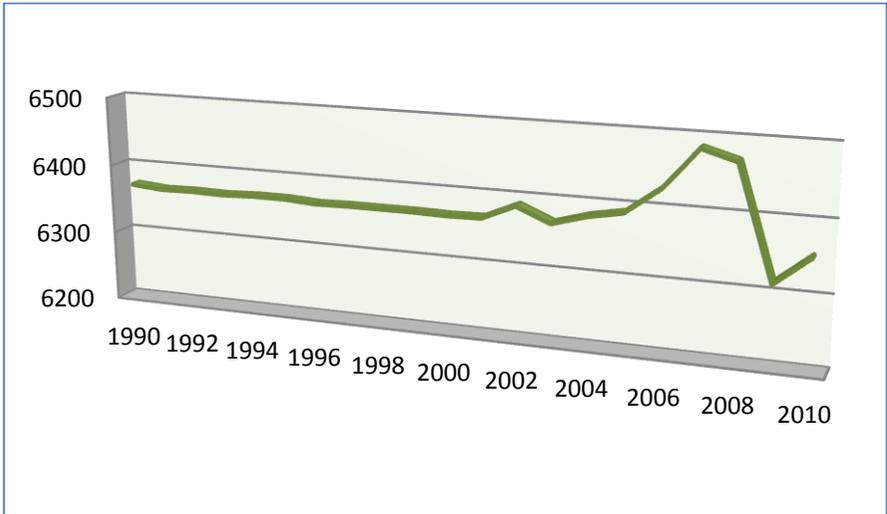
The forest is one of the main reservoirs of the atmosphere's oxygen, also having a big influence over the climate. The destruction of many surfaces of arboriculture could cause changes in some region's climate by increasing the meteorological limits. The forest's clearing has led to the lowering of the precipitations quantity, to the affectation of hydrological rivers regimes and the apparition of the semidry areas. Also, the continuous expansion of the agricultural areas, especially through the forest's clearing and the soil destruction has very badly reduced the forest's life forms [8].

### **Economy-Environment – premises of harmonization in the third millennium**

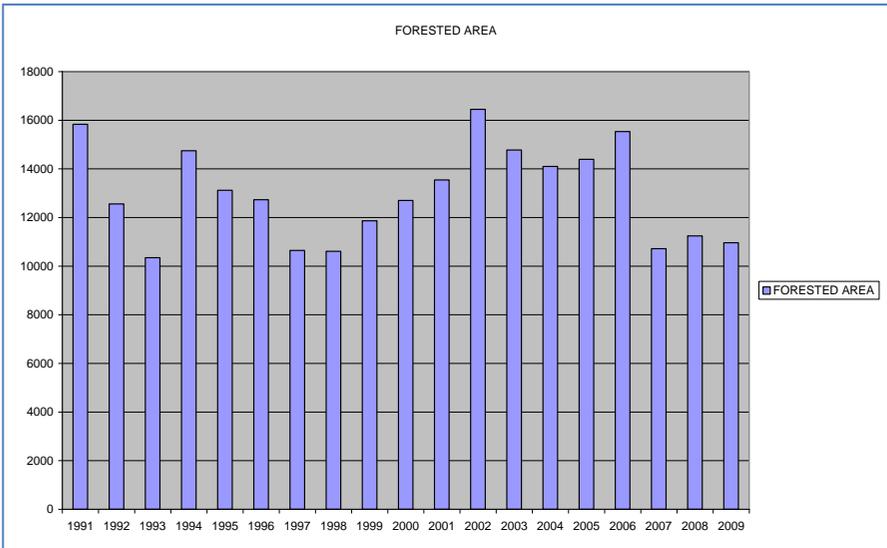
The economy-ecology interaction is manifested on many sides, determined by the complexity of these two systems which have developed big differences between their principals once the economical growing was accelerated. In general, there was a conflict relationship along the history of the human civilization, although, in time, the powers' order went from the subordination of the economical processes to the natural laws towards the increased control over the nature until the destruction of some essential systems for maintaining the ecological balance and the bases of any human activity.

### **Case Study: the forest area and the forested area in Romania within 1990-2010**

The case study is based on the quantitative research method, using statistical values. Along with other works about the situation of the surfaces with forests, this study has as purpose the presentation of the situation of the surfaces with forests in Romania within 1990-2010. The forest's area (thousands hectares) and the forested area (hectares) in Romania in the 1990-2010 period is presented in figures 1-2.



**Figure 1:** Forest area dynamic in Romania within 1990-2010 (thousands hectares)



**Figure 2:** Afforested area in Romania within 1990-2010 (hectares)

The study establishes a growing of the forest's area and of the forested area in the 1990 -2010 period in Romania. The increased level of the two indicators shows a favorable evolution for our country's population.

## Conclusions

Among the terrestrial ecosystems, the forest has a very important place for ensuring the resources and the conditions for human life. The phenomenon of globalization has imposed in all the activity domains, including the forest one, favoring the appearance of strong multinational companies, which attract investments and assure new jobs, but also produce big destructions of the forest's surfaces, its wood being transformed into economic value products.

The recognition of the forests' role and understanding of the danger of destabilization of this environment has created an opinion current for conserving and protecting the forest. In the case of the eco-economy, it will impose the agro-forest industry, which will have as purpose the regeneration of the forest, the afforestation programs being the most efficient solutions for protecting the environment. There must be elaborated legal foresights to accomplish a real reform which must be placed in the center of the forest's protection, taking in mind the rights and habits of the natives, action that must be supported by the ONG-s and local population.

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