# ASPECTS CONCERNING THE MANAGEMENT AND SUSTAINABLE DEVELOPMENT OF FOREST ECOSYSTEMS IN THE NORTH WEST REGION OF ROMANIA

# ASPECTE PRIVIND GESTIUNEA SI DEZVOLTAREA DURABILA A ECOSISTEMELOR FORESTIERE DIN REGIUNEA DE NV A ROMANIEI

**MARIOARA ILEA [1], CRISTINA BIANCA POCOL[1]**

***[1]University of Agricultural Sciences and Veterinary Medicine of Cluj Napoca, Romania, milea2005@yahoo.com***

***Abstract:*** *Sustainable management of forest ecosystems should ensure the synergy of the economic, environmental and social functions. Maintenance and extension of forest ecosystems represent a major objective of the general strategy of environmental protection. In this context, a key barometer, which measures the degree of economic recovery of these products and services, is the analysis of the turnover.*

***Key words:*** *forest ecosystems, economic capitalization, the turnover, wood, forest product*

## INTRODUCTION

Pan-European Ministerial Conferences on Forest Protection have determined the orientation of European forest policies in Strasbourg in 1990, in Helsinki in 1993, Lisbon in 1998 and Vienna 2003. More than 35 European countries have signed these resolutions, thus acknowledging their political orientation. The first Resolution from Helsinki refers to general principles for a sustainable management of the forests in which multifunctional, as in the synergy of the economical, ecological and social functions, have been incorporated into the concept of sustainable development, which gives a meaning that transcends the concept much beyond the mere conservation of resources. Closely linked to this, the following statement in the General Declaration of Lisbon, expresses a fundamental policy choice: "In the 21st century the European forest sector (taking into account the social, economic, environmental and cultural) will

improve its contribution to a sustainable development of the society, especially in the rural areas, to ensure reusable resources, together with local and even world wide environmental protection." Romania has a small area covered by forests, about 27%, and unevenly distributed in relation to major landforms (mountains, hills, plains). The number of plant and animal species in the ecosystem of the forest is low compared with the total number of plant and animal species existing in our country, about 200 species of wood and 1000 herbaceous species, compared to 3500 higher plant species. Wild wood species are almost exclusively found in forest ecosystems. Economic activities with potential impact on the environment are agriculture, forestry, hunting, fishing, mining and quarrying industry, energy production and consumption, water use, land use and landscape transformation. Logging activity has a negative impact on the environment through commercial exploitation of the forests, but also a positive impact through interventions forestry forestation and reforestation. Hunting activity may influence the environment by destroying wildlife habitats due to overexploitation or deliberate destruction of the species considered as being harmful.

## MATERIAL AND METHODS

The NW Region is one of the first regions with regard to total forest area (30.64% of the surface) and engaged in forestry, is placed third at the national level. This wealth is important for the region an advantage, both in terms of raw materials, and the secondary activities recovery and processing of wood. Analysis and synthesis item have been used. As background material, printed materials were used under UN organizations, for global issues, Timber Committee and FAO Forestry Commission for Europe, EU for the problems at European level, and INSSE data on various materials programs on a regional or even national level, but with particular relevance for the forestry sector in our country.

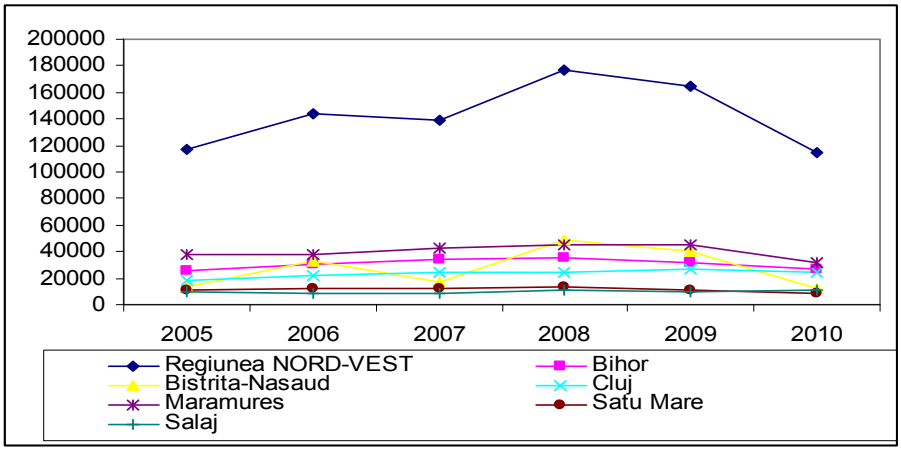
## RESULTS AND DISCUSSION

Sustainable management of forest ecosystems should ensure the synergy of the economic, environmental and social functions. In this sense, the current and strategic management of the forest and its units uses a system of indicators to record, analyze and forecast specific forest and forest units.

Development and use of forest and forest indicators is a complex issue, harmonized with EUROSTAT and the system used by international forestry information system. In Romania, the role of ensuring the content and comparability of the information is provided by the National Statistics Institute (INSSE). The economic activity in forestry is reflected in several categories of products and services related indicators underlying the expression of results, the forestry activity in the physical volume and value. Quantitative indicators such that the volume and quantity of products and services, enable trading prices to determine values of key indicators: forestry unit turnover, gross value added forestry, forestry gross domestic product.

Forestry products and services used to calculate the turnover and other indicators of value are of great diversity. They can generally be grouped into: primary and side forest products. Based on the aggregated value of products and services the annual turnover of the forestry unit can be determined. By adding the turnover of the forestry districts, the turnover of Forestry Departments and the County Inspectorates is obtained, and by summing the turnover of the county forest units, the CAS Autonomous Forest level is reached.

In this context, a key barometer, which measures the degree of economic recovery of these products and services, is the analysis of the turnover.

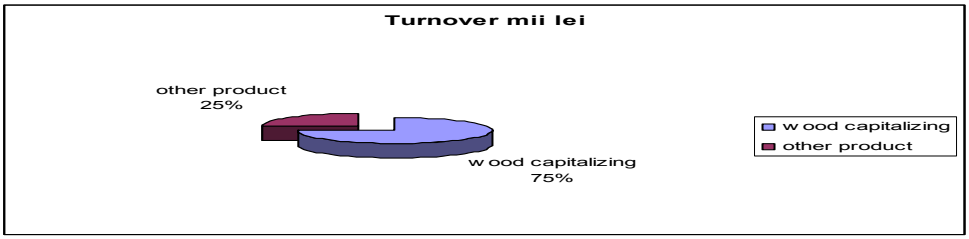



Source: own processing after data from the National Institute of Statistics, Romanian Statistical Yearbook

The valorification of forest products has resulted in the overhead, in achieving a turnover of 1.104.476 thousand lei, representing 108% of the program of 1.025.591 thousand lei of 2010, structured as follows:

-75%, respectively of the total 826.101 thousand lei turnover, was obtained by capitalizing on the destination timber;

-25%, respectively of the total 278.375 thousand lei turnover were obtained by exploiting other products (including those submitted by wood processing) and services;




Review indicator expenses 1,000 lei turnover, calculated at the Administration for 31.12.2010 indicated that the amount of 980 lei.

## CONCLUSIONS

Forest ecosystems are of great interest both in terms of ecological and social role and the economic size of the operation and recovery products and related services.

Analysis of forest ecosystems in Romania shows a concern for maintaining and expanding forest cover. Regarding the economic dimension in sustainable management of their forest indicator system, turnover analysis proved to be a barometer for measuring the economic leverage of these products and services.

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