

RESEARCH ABOUT FOREST CERTIFICATION IN THE NW REGION OF ROMANIA

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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 an effort to stop the irrational exploitation of the forest resources worldwide, certification schemes have emerged in the forest management domain. The FSC Principles and Criteria describe how the forests have to be managed to meet the social, economic, ecological, cultural and spiritual needs of present and future generations. In this context, this paper briefly presents a compact and comprehensive overview of status and trends, as well as challenges and opportunities for forests, forest policy and forest management in Romania. The North West Development Region of Romania represented the area of research. At Romania's level, especially of the region of development NW, one of the two foresters management certificate obtained for Romania are at the Region of development NW level, more precisely The Municipal Forestry Baia-Mare. As an important consequence of this process, the forester certification can benefit both FSC certificate holders and consumers, local communities, workers and NGOs with environmental or social specific.

Key words: SFM- sustainable forest management, forest certification, the North West Development Region of Romania, the FSC Principles and Criteria.

INTRODUCTION

The second Ministerial Conference on the Protection of Forests in Europe concluded that sustainable forest management "means the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems" (Resolution H1, Helsinki 1993).

SFM demands a holistic approach to the forest, balanced interests for the different functions of the forest, a historical background, knowledge of the socio-economic situation and dynamics, as well as a proper consideration of the changes in the global environment. Forests are crucial for the goods and services they provide, which people all over the world and our environment depend on. Sustainable forest management is the declared aim of the community forestry programme. (Acharya, 2002, Ridish K, 2007)

In the last decades, researchers from Romania and also worldwide towards studies have expressed an increased interest about sustainable forest management given that the forest is a resource of global strategy,

regenerating, limited and dependent of the human activity. (Poschen, 2000; Warner, 2000; Pretzsch H. et al., 2006; Vâtcă, 2011).

Therefore, understanding the complex relationships, on a local scale, between environmental, economic and social, is important. (Dumitraş et al., 2011; Wang and Maclarenb, 2012)

Since the UNCED in 1992, National Forest Programmes (NFP) has been widely acknowledged as a means to implement internationally agreed upon sustainability goals for forest management. However, national forest programmes are prepared and implemented in national political, social and ecological contexts, which vary significantly between countries.

(Mielikäinen and Hynynen, 2003; Primmer and Kylloneneb, 2006)

In several countries, national initiatives have further developed criteria and indicators to suit local conditions of monitoring and planning of forest management. (Barbati, 2007; Spilsbury, 2005). A recent survey of three private concessions in the Imataca Forest Reserve, based on partial consideration of criteria and indicators for the sustainable management of tropical forests, revealed that a new form of management is needed. (Vilanova E. et al., 2012)

However, in order to design effective forest management frameworks further research should be conducted focusing on the perceptions of all stakeholders including state and local authorities involved in policy-making procedures and all forest users. (Jones, N., 2012)

Strategy for forestry and forest policy of our country must be defined and in close conformity with international developments. The purpose of this paper is to offer a clear image and as complete as possible on the researches conducted at international level on forest with the intention to prove the importance of granting special attention to this subject in Romania also. The rich experience of countries worldwide attests the role and importance of the forest certification in decision processes. This article is structured following a classical linear path. This paper begins with a brief presentation of the methodological foundation of the analysis management forest certification procedure. It continues with revealing several studies conducted worldwide and an analysis of the case of Romanian forest. Towards the end, conclusions and potential issues are brought in the attention of the researchers.

MATERIAL AND METHODS

Forest Stewardship Council – (FSC), The programme for the recognition of certification forestry (PEFC) and ISO 14000 series standards, concerning the arrangements for environment management constitute major initiatives, internationally recognized, forest management for certification. In an effort to stop the irrational exploitation of the forest resources worldwide,

certification schemes have emerged in the forest management domain. Through these systems, which require compliance of certain principles and standards in terms of forest management and not only, it can be checked the origin of the raw material used in the wood industry. The FSC Principles and Criteria describe how the forests have to be managed to meet the social, economic, ecological, cultural and spiritual needs of present and future generations. They include managerial aspects as well as environmental and social requirements.

Table 1

The FSC Principles

No	PRINCIPLES	Requirements
1.	COMPLIANCE WITH LAWS AND FSC PRINCIPLES	<i>Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.</i>
2.	TENURE AND USE RIGHTS AND RESPONSIBILITIES	<i>Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.</i>
3.	INDIGENOUS PEOPLE'S RIGHTS	<i>Recognition and respect of indigenous peoples' – not applicable for Romania</i>
4.	COMMUNITY RELATIONS AND WORKERS' RIGHTS	<i>Maintenance or enhancement of long-term social and economic well-being of forest workers and local communities and respect of worker's rights in compliance with International Labor Organization (ILO) conventions</i>
5.	BENEFITS FROM THE FOREST	<i>Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.</i>
6.	ENVIRONMENTAL IMPACT	<i>Reduction of environmental impact of logging activities and maintenance of the ecological functions and integrity of the forest</i>
7.	MANAGEMENT PLAN	<i>A management plan appropriate to the scale and intensity of the operations – shall be written, implemented, and kept up to date. The long term objectives of management, and the means of achieving them, shall be clearly stated.</i>
8.	MONITORING AND ASSESMENT	<i>Monitoring shall be conducted -- appropriate to the scale and intensity of forest management -to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.</i>
9.	MAINTENANCE OF HIGH CONSERVATION VALUE FORESTS	<i>Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.</i>
10.	PLANTATIONS	<i>In addition to compliance with all of the above, plantations must contribute to reduce the pressures on and promote the restoration and conservation of natural forests.</i>

Source: own processing after FSC-STD-01-001 „ The FSC Principles and criteria”

The research is designed as an explorative study using the documentation technique by collecting bibliographic information in order to achieve a synthesis of the social, economic and technical studies available until now, watching that they have credibility as possible by forest owners from the

NW region towards the implementation of forest management principles. Research methods used in the study are structured accordingly to the specificity of every step.

The area of research was represented by the North West Development Region of Romania. Within this organization Maramureş was selected. The used data studies were represented by studies and annual reports of the National Institute of Statistics of Romania, statistical data supplied by Romanian Ministry of Environment and Forests. Sources of external data were also used, represented by “Report of the Forestry in the EU and the world” and “The State of Europe’s Forests 2011 report “. (Eurostat Statistical Book, 2011)

Through comparison with observed and collected data at a national level, one has tried to surprise the existent situation at a regional level in Maramures County. It is composite of 6 county (Bihor, Bistriţa Năsăud, Cluj, Maramureş, Satu Mare, Sălaj) and he has a total area of 34,159 km², which represents 14.32 % of the area country. (Tab.2)

Table 2

	Research area characteristics and main indicator						
	NW Region	Bihor	Bistriţa Năsăud	Cluj	Maramureş	Satu Mare	Sălaj
The total area (km²) of which:	34.159	7.544	5.355	6.674	6.304	4.418	3.864
– agricultural area	20.923	4.993	2.989	4.246	3.112	3.175	2.408
– forests and other forest land	10.329	1.949	1.911	1.702	2.892	809	1.066
– rivers and lakes	510	136	75	89	56	96	58
– other surfaces	2.398	466	380	637	244	339	332
– living space	39,667	8,80	4,438	10,089	7,037	5,542	3,761

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

Increase significantly the area of sustainable managed forests, including protected forests, and increase the proportion of forest products derived from sustainably managed forests.

RESULTS AND DISCUSSION

In Romania, the paradigm of the forestry sector completely changed, in that it has been reported some challenges:

- Romania became member of the European Union, with duties of international level in terms of forest/ environment protection and energy production from renewable sources (wood biomass is one of them).

- Following the surrender of forests, in present, more than half of the country's forest is in private ownership or public ownership of administrative-territorial units.
- Large international corporations of first processing of wood entered on the wood market causing the start of its maturity (especially in terms of wood).
- Important local firms of wood exploitation, which are using modern equipments, with high productivity and with low impact on the environment.

To this challenges it has to be responded in a different manner in which concerns the elaboration and implementation with success of new forester strategies.

In an effort to stop the irrational exploitation of the forest resources worldwide, certification schemes have emerged in the forest management domain. Through this systems, which require compliance of certain principles and standards in terms of forest management and not only, it can be checked the origin of the raw material used in the wood industry.

At Romania's level, especially of the region of development NW, the indicators concerning the activity of certification of forester sector are presented in the Tab.3 and Tab.4.

Table 3

Registered forest certificate organization			
Certificate code	Organization name	Issue date	Expiry date
SA-FM/COC-001912	Baia Mare Municipality	5 Jun 2008	4 Jun 2013
SA-FM/COC-002810	Silvic District Padurile Sincii	14 Mar 2011	13 Mar 2016
SA-FM/COC-002463	Silvic District Privat Baraolt	12 Apr 2011	11 Apr 2015
SA-FM/COC-001470	Romsilva, DS Arad, Neamt, Suceava, Timis	9 May 2011	8 May 2016
SA-FM/COC-002829	Romsilva, DS Maramures	31 Mar 2011	30 Mar 2016

Source: processing after data from the www.info.fsc.org/PublicCertificateDetails

Table 3

The statistics on Romanian forest certificate

	Worldwide	Romania	Regiunea NW
Total forest area certified FSC	135 mil ha	21.600 ha	7.535 ha
Chain of Custody certificate number	19617	43	12
Number of certified forest management	1010	2	1

Source: processing after data from the www.info.fsc.org/PublicCertificateDetails

Comparing the observed and collected data at a national level, it has been noticed that one of the two forester management certificate obtained for Romania are at the Region of development NW level, more precisely The Municipal Forestry Baia-Mare.

As a pre-emerged action of the certification of FSC system and in the need of promotion one appropriate management, through the project

“Responsible forester management for the development in the eco-region Danube - Carpathians” WWF initiated the identification of woods with highly conserving value in Maramureş. (Iorgu *et al.*, 2008)

It have been identified almost 1.200 ha which contain rare forester eco-systems, majority secular forests , part of this forests sheltering a series of wet areas (turbării, lakes, marshes etc.) in which it has been preserved an exceptional biodiversity. Punctually, in this category fits Tăul Negru Reservation and the areas around, Tăul Pleştii, Preluca Bobului, The Marshes from Apa Rece, The Stands form Văratec and Cisma.

A special place it has the source of great value of fir tree from Strâmbu Băiuţ, which is the result of a great genetic fund and favorable vegetation conditions, the seeds from the reserves being sought in the country and in Europe, as well.

The Forestry Department Maramureş constituted as a resource manager in the group established in order to obtain the FSC certificate. The group is formed from 6 forest districts holding a total surface of 60.755, 7 ha, as it follows: the Baia Mare Forestry – surface 8.815, 3 ha; Groşi Forestry – surface 8.938, 3 ha; Mara Forestry – surface 6.304, 9 ha; Strâmbu Băiuţ Forestry – surface 10.980, 5 ha. Tăuţi Forestry - surface 7.024, 0 ha; Vişeu Forestry - surface 18.692, 7 ha.

In the process of forest certification of The Forestry Department Maramureş, it had been identified some nonconformities, and the corrective measures that must be undertaken.

Thereby:

- The measures of labour protection are not conform with the provisions of national legislation.
- The health insurances and the protection of the employees and their families is precarious.
- Are necessary social impact evaluations of the performed operations, conform to the intensity and their amplitude.

The environmental impact assessment must conform to the application of forestry operations, taking into account the unicity of affected resources, being integrated in the management system and including considerations concerning the landscape and the impact of the processing installations.

As an important consequence of this process, the forester certification can benefit both FSC certificate holders and consumers, local communities, workers and NGOs with environmental or social specific. In the present, the certification is a market mechanism. Being demand and supply for the FSC certificated wood there is a highly interest in the production and marketing of the certificated products. Mainly, the entrance decision in the certification process is generally connected by the obtaining

of some benefits, like the access of certificated wood on the new markets or the maintaining on the existing markets.

In addition, you can get other benefits too:

- The improvement of the management systems, including the planning mechanisms, the monitoring, evaluation and reporting
- The improvement of processes of administration of the firm and of business office
- The firms can respond to the demand of products of controlled origin
- The improvement of productive processes

An extra reason for the certification is the economical-financial one. Besides the access on the new markets or the maintain on the existing ones, sometimes, the companies can benefit of increased prices for the products which carry the FSC logo. The economic value of forests and their influence on the environment is analyzed from the point of view of the forestry surface, of wood exploitation following the production volume, the recovery works of the destroyed or degraded woods, the number of workers and the economic impact of this activity (Tab.5).

Table 3

The main economic-financial value of forest indicator of NW Romanian Region

	The area of state-owned forest (ha)	Number of staff	Mass timber (thousand cubic meters)	Turnover in 2010 (ROL)	Gross profit 2010 (ROL)
Cluj	63.111	346	109,0	23.940.242	58.217
Bistrita	13.472	224	71,8	12.138.093	-2.055.574
Maramures	145.509	550	399,6	31.882.832	333.365
Bihor	67.396	442	179,1	26.711.688	316.810
Satu Mare	30.431	203	67,2	11.087.118	53.269
Salaj	35.485	254	63,0	8.858.444	-425.340
REG NV	355.404	2019	889,7	114.618.417	-

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

Despite the fact that the average price of wood (standing or roadside) has increased almost continuously after 1990, as it was lower than in other Central and Western European countries, it is hard to anticipate its evolution in the future. On a medium term, it might be possible that the prices for standing or roadside wood in Romania would become similar to those in other Central European countries. (Abrudan *et al.*, 2009)

As Romania is a net exporter of wood and wood products, the international evolution of wood product prices will clearly have an impact on the domestic market. An important objective is to establish in which way and in which percentage the increase at the NW development region level, through careful analysis of free market, as the one who dictates the price.

Forest certification is market driven – aiming to improve forest management through market-based incentives, and to improve market access and share for the products of such management. It addresses the quality of forest management, as opposed to the quality of forest products. (Bass S., 2004)

In the same order, Tikina A., *et al.* (2008) show that the factors that influence obtaining forest certification in the U.S. Pacific Northwest are market pressure, land ownership pattern and water-body abundance.

CONCLUSIONS

The findings from many studies indicate that both community forestry users and authorities tend to focus on social and socio-economic aspects when evaluating the community forestry. After these conclusions, the need to elaborate new forester strategies was detached and to respond to the actual needs of Romanian forester sector, ecological, social and economical. In equal measure, the forester certification can benefit FSC certificate holders and consumers, local communities, workers and NGOs with environmental or social specific.

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