# Forest management in the prospect of Romania's integration in European Union.

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#### 1. Introduction

Any management system irrespective to the size of the economic unit where it is implemented integrates all the organizational and governance activities in order to combine resources for making as many goods and services with the least financial effort.

The peculiarity of forest sector consists in the complexity of the main production factor which depends on a multitude of incontrollable conditions and is interacting which the biotope – this is the forest site. It is more and more relieved on international level the impact of forest's irrational harvesting on site conditions, diminished biodiversity, environment degradation and finally extinction of some species, all these having important consequences on the economy itself.

According to local geographical particularities and to the evolution of idea of sustainable forest management, in European countries there have been developed different forest administration systems. Romania is still going trough a transition period from a centralized and controlled economy to a market one, based on economical liberalism and on private property (Prahoveanu, 2002). In Romania forest restitution must be finalized in a moment when Romanian society is suffering a double pressure: to support transition costs and the cost of EU integration.

# 2. Goals, material and methodology

In this paper it is tried to analyze how Romanian forest administration system can resolve the two mentioned issues and to identify the aspects to work on so that the forests and its owners would have gained.

A chunk of relevant data regarding forestry in EU was analyzed in order to identify the advantageous aspects that can be implemented in Romania, but also negative aspects to get rid off. The methodology consists of comparative analysis using a specific combination and adaptation of compared management models/theories (Burciu, 2004).



Figure 1. Combination of Farmer-Richman, Negandhi-Prasad and Hofstede models for a management system analysis (after Burciu, 2004)

Forest administration efficiency has been calculated using the following indexes: forestry contribution to GDP (%); employees number in forest administration per 1000ha of forest land; value of wood and non-wood products (U.S. \$/ha); forest area percent in total area for EU countries (%); forest area per inhabitant (ha); proportion between wood harvest and forest growth (%); protected areas percentage (%).

Because of lack of financial data there were not included in this efficiency calculus the following indicators: efficiency by costs, forestry profit, profit rate, labor productivity and average monthly income per employee.

# 3. Results

Administration systems' efficiency in forest sector (ASEFS) has been calculated using, for every EU country, the minimum and maximum value of each from the mentioned indexes (table 1). To these values it has attributed grades 0, respective 10. For states with intermediary values, the grades were balanced calculated which the real values of every index. The final grade (ASEFS) has been calculated as arithmetical average between partial grades.

Table 1 ASEES calculus

| 1 401                | I. ABETS ( | ettiettiis |   |         |         |                    |       |       |
|----------------------|------------|------------|---|---------|---------|--------------------|-------|-------|
| Indicator<br>Country |            | Hmnlovage  | Harvested<br>products'<br>value –<br>2005<br>(US \$/<br>ha) | Forests | / inha- | harvest<br>/growth | areac | ASEFS |
| Austria              | 0,4        | 2,0        | 304   | 45,8    | 0,46    | 61,6               | 20,2  | 3,81  |
| Belgium              | n.d.       | 6,4        | 213   | 22,0    | 0,07    | 85,7               | 27,6  | 4,78  |
| Czech<br>Republic    | 0,6        | 9,4        | 532   | 33,3    | 0,26    | 63,3               | 24,6  | 5,21  |

<sup>&</sup>lt;sup>1</sup> It indicates the added value in forestry (installation, culture, forest harvesting) to each country's GDP, except preindustrialization and furniture industry added value.

<sup>&</sup>lt;sup>2</sup> This values reflect protected areas' surface (IUCN categories I to VI), reported to total forest area.

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|---|------|------|-----------------------|------|-------|------|-------------------|--------------|
|   |      |      |                       |      |       |      |                   |              |
| Cyprus  | 0,1  | 5,3  | n.d.                  | 12,9 | 0,16  | 50,0 | n.d.              | 1,97         |
| Denmark   | n.d. | 9,3  | 519                   | 10,4 | 0,09  | 63,6 | 20,5              | 4,90         |
| Estonia   | 2,3  | 4,7  | 128                   | 44,7 | 1,41  | n.d. | 9,1               | 4,28         |
| Finland   | n.d. | 1,1  | 130                   | 64,7 | 4,25  | 67,6 | 6,3               | 5,18         |
| France  | n.d. | 2,3  | 2                     | 27,8 | 0,26  | 50,8 | 17,9              | 2,40         |
| Germany   | n.d. | 6,5  | 17                    | 30,1 | 0,13  | 66,7 | n.d.              | 3,31         |
| Greece  | n.d. | n.d. | n.d.                  | 25,5 | 0,32  | 58,3 | 29,1              | 4,22         |
| Ireland   | n.d. | 5,6  | 124                   | 8,4  | 0,16  | 66,1 | 1,0               | 2,41         |
| Italy   | n.d. | 3,7  | n.d.                  | 32,7 | 0,17  | 27,3 | 18,8              | 2,45         |
| Latvia  | n.d. | 6,5  | n.d.                  | 44,6 | 1,29  | 76,0 | 16,3              | 5,35         |
| Lithuania                                       | n.d. | 6,6  | 101                   | 32,0 | 0,54  | 46,2 | 14,9              | 3,25         |
| Luxemburg                                       | n.d. | n.d. | n.d.                  | 34,6 | 0,21  | 54,1 | 0,8               | 2,59         |
| Malta   | n.d. | n.d. | n.d.                  | 1,2  | 0,001 | n.d. | 10,0              | 0,76         |
| Great   | 0,5  | 4.0  | 159                   | 10.1 | 0,04  | 52.2 | 22.1              |              |
| Britain   | 0,5  | 4,9  | 139                   | 10,1 | 0,04  | 53,2 | 32,1              | 3,07         |
| Netherlands                                     | n.d. | 6,5  | 141                   | 9,1  | 0,02  | 41,9 | 23,6              | 2,79         |
| Poland  | 0,4  | 6,7  | 96                    | 28,6 | 0,23  | 58,0 | 15,7              | <b>3,0</b> 7 |
| Portugal  | 2,9  | 3,3  | n.d.                  | 36,7 | 0,34  | 75,6 | 17,3              | 5,15         |
| Slovakia  | 0,5  | 13,2 | 169                   | 41,2 | 0,38  | 40,6 | 41,2              | 4,86         |
| Slovenia  | n.d. | 2,5  | 115                   | 54,2 | 0,55  | 36,2 | 7,2               | 2,73         |
| Spain   | n.d. | 2,1  | 49                    | 26,7 | 0,34  | n.d. | 23,8              | 2,52         |
| Sweden  | n.d. | 0,6  | 115                   | 60,3 | 3,07  | 65,7 | n.d.              | 5,05         |
| Hungary   | 0,3  | 6,7  | 184                   | 19,5 | 0,18  | 50,0 | 20,0              | 2,99         |
| Domania   | n d  | 7.3  | 66                    | 26.7 | 0.27  | 19.2 | 7.4               | 2 73         |

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m.f.. – managed forests; n.d. – no data.

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The most efficient administration systems in forest sector are those from the countries with o rich percentage of forests (more than 30%), but especially the

countries with a long tradition in a matter of respect for forests. Romania's place is in the last third of list, being followed by countries as France, Luxembourg, Spain, and Ireland. There were identified the main features of efficiency. At European level, there can be mentioned the followings main characteristics:

- Increasing of forest owners amount and decreasing of average ownership with their inferring in forest sustainable development;
- Increasing of owners' interest for forest's protective services and decreasing the interest for wood production<sup>3</sup>;
- Private ownership on forests implies a huge variety of organization, association and administration systems, according to socio-economical medium;
- Actual tendency tries to identify the centralization degree which assure maximum efficiency and also the decentralization degree which assure maximum implication and responsibility (Häusler, Scherer-Lorenzen, 2002);
- In private forestry of developed countries (Germany, Finland, Sweden, Austria, France) the economical aspects are decided by owners, but they take correct decisions appealing to consultancy companies. They also effectuate technical works trough specialized companies on contractual basis;
- Where forest sustainable management were less important for post-war governments the consequences are under-utilization and ageing of forests (Greece<sup>4</sup>, Spain<sup>5</sup>, Italy), or diminution of forests' area (Ireland);
- Some countries invest important amounts in employees training. Also, in developed countries the accent is on decentralization (France, Italy, Great Britain<sup>6</sup>);
- There are obvious concerns for increasing forest area trough reforestations (Denmark, Great Britain, Ireland, Spain);
- Forest management is generally based on sustainable development principles, but in some countries (Great Britain, Italy) forest administration is leaved to owners' latitude, with no management plan.

Regarding **Romania situation** it's worth highlighting the need for centralization in decision making process, the need of having authoritarian leaders, the preference for a stout relation with a single chief to obtain his protection and to avoid assuming the responsibility of some contraries opinions. The employees in companies with this kind of culture will have never different opinions with their boss and they execute orders without resistance. Romanian managers prefer to involve in daily activities then to plan medium or long term strategies. The consequence is that all the strategies are less elaborate<sup>7</sup>.

National Forest Administration<sup>8</sup> (NFA), the largest administrative structure for Romania's forests, is a juridical person with financial autonomy, having in its

<sup>&</sup>lt;sup>3</sup> In developed countries (Great Britain, Netherlands, Denmark, Italy etc.), but especially in the preponderant urban ones, with a high density oh inhabitants and where forests were decimated in the past.

<sup>&</sup>lt;sup>4</sup> http://greece.russiansabroad.com/country\_page.aspx?page=163

<sup>&</sup>lt;sup>5</sup> http://www.fao.org/documents/show\_cdr.asp?url\_file=/docrep/x5364e/x5364e05.htm

<sup>&</sup>lt;sup>6</sup> http://www.forestry.gov.uk/: Forestry Devolution Review - Interdepartmental Group Report.

<sup>&</sup>lt;sup>7</sup> http://www.markmedia.ro/article\_show.php?g\_id=540

<sup>8</sup> http://www.rosilva.ro/

structure territorial units with no juridical autonomy (forest directorates) and only one unit is a juridical person (Research and Forest Management Institute).

The main aspects that should be considered in transforming the forest Romanian administration (referring especially to *NFA*) into a competitive, European one are presented in *figure 2*. By those there are also mentioned: separation of administrative-technique sectors from commercial activity; total transparency in administration; attracting of small forest owners.

Table 2. National Forest Administration – SWOT analysis

| Strengths   | Weaknesses   |
|---|--|
| • Big turn-over;  | • Excessive centralization;                                  |
| <ul><li>Employees' professionalism;</li></ul>           | <ul><li>Politicization of managing structures;</li></ul>     |
| <ul> <li>Stable hierarchical structure;</li> </ul>      | <ul> <li>Faultily human resources management;</li> </ul>     |
| <ul> <li>Strength connections with other</li> </ul>     | <ul><li>Employees mentality;</li></ul>                       |
| similar extern companies.                               | <ul> <li>High level of corruption in system.</li> </ul>      |
| Opportunities   | Threats  |
| <ul> <li>Number still small of other forest</li> </ul>  | <ul><li>Property diversification;</li></ul>                  |
| (private) structures;                                   | <ul><li>Increasingly rigidity in front of changes;</li></ul> |
| • Reorganization trough privatization;                  | ullet Integration in EU and obligatorily restitution         |
| <ul> <li>Big supply of qualified, young work</li> </ul> | of all forests;  |
| force, with a new mentality.                            | <ul> <li>Diminishing of forest area.</li> </ul>              |

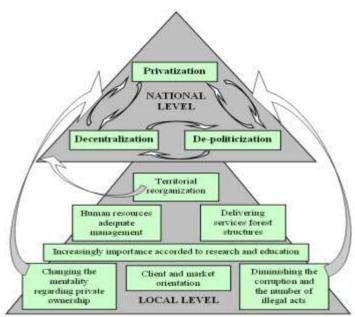


Figure 2. Reorganization of Romanian forest administrative system

In a report of World Bank<sup>9</sup> there are presented five principles which practically define the performance of an institution: delegation, financing,

<sup>9</sup>Forest institution in transition – Experiences and lessons from eastern Europe. The World Bank, 2005.

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performing, use of information and imposing. These elements should be also considered in forest administration reorganization. The activity should especially be focused on the next human resources aspects: personal adequate motivation; stimulation of values and promotion strictly on professional criteria; stimulation of communication; continuous perfection and training; tasks' clear establishment; sanctions proportional with the act.

### 4. Conclusions

Reorientation of Romanian forest administration towards sustainable efficiency by reorganization of actual system becomes absolutely necessary; it should be created a new system, capable to promote Romanian forests on European level at its true value. To do so, there should be taking up from west-European systems the elements of administrative efficiency and implementing them into Romanian forest administration because, in the actual informational era, any step behind is very difficult to be recuperated.

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## **Abstract**

# Forest management in the prospect of Romania's integration in European Union<sup>10</sup>

This paper present succinct the forest management systems from EU countries and compare them with Romania's situation taking into consideration the main features of socio-economical, political and cultural environment from Romania. It is also delineate a model for Romania's forest administration system whose efficiency can be estimated and proved in time using forest sustainable management's indexes.

Key words: management, administration, reform, forest.

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