Legal Aspects
of European Forest Sustainable Development

Proceedings of the 6th International Symposium
Poiana Brasov, Romania

Editors
Ioan Vasile Abrudan, Franz Schmithüsen, Peter Herbst
Ioan Vasile Abrudan, Franz Schmithüsen, Peter Herbst (Editors)
Legal Aspects of European Forest Sustainable Development
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The authors are fully responsible for the content of their articles included in these Proceedings.

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PREFACE

The 6th International Symposium on "Legal Aspects of European Forest Sustainable Development" was held in Poiana Brasov, Romania, June 16 – 20, 2004. The meeting was sponsored by the Ministry of Agriculture, Forests and Rural Development, National Forest Administration – Romsilva and the Faculty of Silviculture and Forest Engineering Brasov; substantial support was also provided by the Swiss Federal Institute of Technology Zurich (ETH Zürich). The meeting was organized by Dr. Ioan Vasile Abrudan (Faculty of Silviculture and Forest Engineering), Dr. Georghe Parnuta (Forest Research and Management Planning Institute) and their respective teams, and Peter Herbst (IUFRO 6.13.00). Altogether, twenty-nine participants representing sixteen countries participated in the 2004 Symposium.

Following five previous meetings, in Austria (1998 and 1999), Bulgaria (2001), Latvia (2002) and Czech Republic (2003), the main objective of this meeting was to promote the exchange of information amongst researchers and practitioners active in forest law and environmental legislation in Eastern and Central European countries. It provided a forum for the exchange of experiences concerning the formulation, implementation and administration of newly adopted forest and forest related laws, created an opportunity for participants from various countries to get familiar with the new legal situation in other European countries and to contribute to the discussions from their experiences.

The symposium started with the formal welcome speeches by Viorel Marinescu (Director - Forest Strategy and Legislation, Ministry of Agriculture, Forests and Rural Development) and Constantin Corduneanu (Director - National Forest Administration ROMSILVA). Country sessions followed and we were happy to welcome Turkey and France for the first time. Presentations covered experiences and recent developments in Armenia, Bosnia & Herzegovina, Bulgaria, the Czech Republic, Iran, Romania, Serbia, Slovakia, Slovenia, Turkey and Ukraine and as a broad issue - the EU.

The 2004 Symposium was a success and everybody felt there was a high demand to continue the process. I am therefore very glad to announce IUFRO 6.13.00’s 7th International Symposium on "Legal Aspects of European Forest Sustainable Development" to be held in Belgrade (Serbia), April 2005, as well as the 8th International Symposium on "Legal Aspects of European Forest Sustainable Development" in Istanbul (Turkey), summer 2006.

Peter Herbst, Coordinator IUFRO 6.13.00
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BULGARIA FOREST DEVELOPMENT PROJECT

BY NICKOLA STOYANOV AND MARIA STOYANOVA

Bulgarian society perceives forests as part of our national wealth and part of our national identity. Their economic, social and ecological functions are of significant importance to the sustainable development of society and for improving the quality of life, especially in rural and mountain areas. To a great extent these functions are unique not only in a national but in a global aspect.

As a result of the political and economic changes in our country after 1989, the Bulgarian forest sector is in a period of reform, directed towards functioning under market economy conditions and respect of ownership. The complexity of this transition is additionally predefined by the tense social and economic situation in the country. And because of that, a number of negative changes in the development of the whole society and the economy have had their impact on the forest sector too.

The Bulgarian forestry sector is in the process of a period of reform that is driven by the emerging socio-political context, whereby the roles of Government and of civil society are rapidly changing. The legal and regulatory framework for sustainably managing forests in the free market economy has not yet been adequately developed; and, at the same time, there is strong political pressure to restructure and privatize the functions of the National Forestry Board (NFB).

Under the Government’s policy for accession to the EU, the forestry sector will need to adapt to new roles in order to safeguard the public interest in forest management under changing market forces. With assistance from a planned World Bank loan, for a Forest Development Project (FDP), the Government planned to address the problems identified in the forestry sector. Project preparation for the FDP started in April 2003 as did the Restructuring Study of the NFB. There was a general consensus that the reforms envisaged should be based on a comprehensive national forest sector policy and strategy (NFPS), on the traditions and experience of the Bulgarian Forest Sector, and on the process of adaptation to market economy conditions. A new forest policy and strategy would outline how the Government intends to realize its vision for the future for the forestry sector.

According to the Government policy for joining Bulgaria into EU, forest sector should adapted and started playing new role in terms of public interest protection of forest management in the conditions of a market economy. Government of Republic of Bulgaria asked for the financial support the World Bank with regard to implementation of Bulgaria Forest Development Project that would supported necessary changes in and general development of the forest sector. Project implementation was planned for the period 2004-2010. Project objective is by restoration and sustainable management of Bulgarian private, communal and state forest resources to increase their contribution to national economy and environment conservation. The FDP was also preliminary directed to biodiversity conservation in Bulgaria through conservation objectives integration into forest management.

Bulgaria has requested World Bank support for a forestry project addressing institutional reform, private owners, forest fires and incorporating biodiversity conservation in forest management. The project would contribute to the Government’s reform of the state forestry sector, mainstreaming of biodiversity and environmental values in forest management, investment in silvicultural and fire prevention activities, placing of state forestry on a self-funding basis and support for private forest owners. The sector investment project would be financed by an investment loan blended with a GEF grant. The project aims to increase the
contribution of forests to the national economy and to the benefit of rural populations through sustainable management of state, communal and private forests.

**Description of subcomponents with potential impacts on livelihoods**

The following sub-components of the Forest Development Project are relevant to the Process Framework:

- National Forest Policy and Strategy Preparation;
- Study on the Restructuring of the state forest sector administration;
- Forest Sector Development Project Preparation;
- Independent Environment Assessment of the whole project;
- Independent Social Assessment of the whole project;
- Feasibility Study on Fuel Switch Project.

The objectives of the project preparation are the following:

- Improvement of Public Forest Sector management;
- Management capacity increase of private and communal forest owners;
- Adapting state forest management to market economy and new realities raising from the restitution;
- Integration of conservation activities in forest management;
- Carbon benefits from Bulgarian forests enhancement.

**Financing of Bulgarian Forest Development Project**

Bulgarian Forest Development Project is of 44.3 million USD total value. The loan from the World Bank is of 30 million USD amount from which 7 million USD are a GEF grant, and the co-financing by other donors is 7.3 million USD.

**Characteristics of Project components**

**Development of the National Forest Policy and Strategy**

A number of principles form the basis for the development of the National Forest Policy and Strategy and its planned implementation with the over-riding one being sustainability. Bulgarian forests must contribute positively to sustainable development and meet internationally recognised standards of sustainable forest management (SFM). The next principle is involvement. Forests are a national treasure and belong to the people of Bulgaria. Forestry should involve the wider public in its activities and should be managed in a manner that enjoys broad public support. The third principle is that forests should contribute positively to the well being of the people of Bulgaria. This contribution may be in social, economic or environmental terms and the value and importance of non-market functions is recognised.

These principles are encapsulated in the vision for the forestry sector:-

“*The Bulgarian forest is a national asset. The resources of the forest ecosystems retain their ecological, social and economic functions for improving the quality of life of people. Forests are professionally managed by a stable forest sector with broad public support and mutual respect and integration of the interests of all stakeholders.*”

The NFPS is quite comprehensive and addresses:

- Forest resources and forest management;
- Non timber forest resources;
- Biological and landscape diversity;
- Social functions of forests;
- Tourism and recreation;
- Forest industry and standards;
- Institutional capacity and role of the state;
- EU integration and international agenda;
- Regional development; and
- Financing and implementation.
The main elements of the NFPS include:

- Separation of the ownership and authority functions of the State with the establishment of more efficient organisations for management of state forests and compliance;
- Extension of the forest area through the encouragement of private planting and use of SAPARD and other EU funding;
- Enhancement of the multifunctional aspects of forests and their contribution to rural development;
- Focus on natural type forests and use of silvicultural systems to promote more stable and ecologically balanced forest stands;
- Increasing the level of harvesting from current average of 4 million m3 to 8 million m3 by 2013; and
- Improvement in the forest infrastructure with the construction of new roads and upgrading of existing roads annually up to 2013.

In general terms, NFPS looks at the forest sector including both forestry and the forest industry. It sets the framework for all major decisions in the sector for the next 10 years. NFPS has three basic goals:

- Sustainable development of an economically viable forest sector through multifunctional forest management in market economy conditions.
- To comply the goals and the means for the sustainable development of the forest sector with international criteria.
- To provide national and international financial resources and to support the development of the sector.

Generally, the expected results of implementation of NFPS could be summarized as follows:

1. **Environmental aspects:**
   - Extension of the forest area;
   - Acceleration of the silvicultural and forest protection activities;
   - Conservation and restoration of the biological and landscape diversity components through mainstreaming biodiversity into forest management practices.
   - Extension of the protected areas network;
   - Enhancement of the role and the contribution of forests for mitigating climate changes.

2. **Social aspects:**
   - Creation of additional employment in the sector;
   - Enhancement of motivation and qualifications of forest workers;
   - Adequate use of tourist and recreational potential of forests;
   - Reforms in the fuel-wood supply policy for local population.

3. **Economic aspects:**
   - Increase the revenues for the sector from: market orientation of the commercial functions of forests;
   - Increase and reorganization of harvesting;
   - Increased production and export of forest industry products;
   - Development of alternative uses for the forest resource;
   - Improved effectiveness of the control in forests etc.

The Bulgarian NFPS is not envisaged as a static document but more as a dynamic process adapting over time.

All stakeholders, and not just the MAF and NFB, have a role to play in the implementation of the NFPS and a responsibility to contribute to its success through active participation and collaboration.
While the NFPS is intended to guide our actions over the next ten years, we recognize that the strategy will have to change and adapt to varying factors to ensure its relevance and direction.

NFPS was consecutively adopted by the NFPS Commission (Established with an Ordinance of the Minister of Agriculture and Forests and comprising 28 members representatives of different stakeholders groups), the Ministry of Agriculture and Forests and the Bulgarian Government (4th September 2003). The next goal is the adoption of the document by the Bulgarian Parliament, but the NFPS hasn’t adopted till now.

**Study on the Restructuring of the state forest sector administration**

The restructuring of the state forest administration in Bulgaria is part form the World Bank Forest Development Project. The restructuring is necessary as the forest administration faces difficulties in public forest goods and forest resources management in a sustainable manner.

During last ten years Bulgarian forest sector went through significant changes. With the new forest law from 1997 and the structural and functional changes from 1999 r. commerce state forest fund functions are privatized by creation of state joint-stock companies that later have been announced for privatization. During the same period the ownership of forests and lands from forest fund has been restored. Fast changes of transition from planning to market economy have provoked concussion in forest sector branch and because of the complicated conditions in which those have had to be applied. To get over the critical situation some changes are needed that would guarantee biodiversity conservation in Bulgarian forests by their sustainable and multifunctional management.

The Bulgarian Government took a decision for the development a long term national strategy for development of forests and forest economy to overcome problems in terms of forest sector funding and the reinvestment in it.

During March 2003 a study on NFB financing, structure and activities begins, as well as an analysis of forest industry status, legal framework and the stakeholder opinions. The study is leaded by an Austrian – Irish Consortium with the participation of more than 200 NFB state employees and about 100 other Bulgarian experts from different institutions and organizations. The expected final result of this study is phased and costed detailed plan for restructuring of the National Forestry Board and Bulgarian forest administration. The plan for adaptation will be applied the World Bank Project “Bulgaria – forest sector development” financial support for the period of six years.

An overall frame and vision about the forest sector development during next five years has been developed on the basis of the work results under the project for National Forest Policy and Strategy, the analysis from the restructuring project, international experience and discussions with different stakeholder groups. 15 basic strategic directions for change are outlined that summarize the consequences from accumulated negatives as well as the new development directions. The development vision is based on general principles of sustainability – economic vitality, social engagement and environment sustainability.

After the strategic frame and vision development based on the Bulgarian experience and best world practices the new project phase has started – preparation of draft models of the future Bulgarian state forest sector development. Expert teams have appointed three models that differentiate according to the functions and responsibilities unification or separation.

Simultaneously for the three models the following general states are characteristic:
- State forests and forest lands remain of state ownership;
- Own accounting and control over funds flows;
- Timber harvesting activities will begin with own strengths and means in quantity under 10 % from the total necessary for the country, and the rest 90% will be assured by the private sector;
- Change in timber sale procedures by increase of timber sales from permanent storage – up to 75% from the sale timber during 2008;
- Reduce of employee staff is not foreseen;
- Sale of timber, non-wood products and services at market prices;
- Support to non-state forest owners;
- Forest protection service to be divided into two units – “Forest police” that is responsible for the fight against illegal activities in all forests regardless their ownership status, and a “Control office” that will watch the regulation framework observation as well as the implementation of the planned forest civil and cultural operations;
- Establishment of national forest-economy data base.

On its session on the October 16th 2003 the CoM approved the model for future development of Bulgarian state forest economy sector and the draft law for the establishment of “National Forest Company” state enterprise.

The chosen by the Bulgarian Government model provisions the functions and responsibilities to be clearly separated. Economic functions in Bulgarian forests will be implemented by market oriented independent state organization. Control-management functions in all forests are applied by Ministry of Agriculture and Forests. The new responsibilities of the Ministry are: conduct inspections in forests, support to non-state forest owners and management of forest police. For every function there will be an independent unit.

The functional model for the forest sector restructuring allocates about 100 million leva investments for the next five years, non-wood products income growth and increase of the supplied timber total quantity to 5 million cubic meters at the end of 2008 through gradually harvesting extension without disturbing ecology balance. The additional infrastructure investments will allow access to new stands/plantations, maintenance and improvement of forest infrastructure as well as conservation of their environment and public useful function.

The safeguard of and control in forests will improve. Through forest economy future development model the budget will release from additional forest sector funding and subsiding; funds accumulation is expected and their re-investment into forests. The employed in forest branch sector will be financially stimulated according their work results and final consumers will be supplied by quality raw material in the necessary quantities.

The principle functions and responsibilities separation serve most to the new strategic orientation of the state forest sector in market economy conditions. On one hand this gives possibility to the state to apply national forest policy and to conduct control over the forest management and use regardless the type of ownership. On the other it gives the state the right as an owner to exercise its property rights with responsibility to Bulgarian society in the conditions of a market economy.

The forest sector development model guarantees biodiversity conservation in Bulgarian forests and their multiplicity functions in terms of economic, social and environment aspects.

Forest Sector Development Project Preparation

Bulgaria Forest Development Project is implemented in two phases – preparatory and investment. During the preparation phase in-depth studies on the management, use and conservation of the forest resources are undertaken, and basic project outputs by components and financial provision that are planned for implementation during the investment phase are justified.

Project Preparation objective is to design basic parameters for forest resources value optimization and performance of sustainable forest sector management model by:

- Improvement of Public Forest Sector management;
- Management capacity increase of private and communal forest owners;
- Adapting state forest management to market economy and new realities raising from the restitution;
- Integration of conservation activities in forest management;
- Carbon benefits from Bulgarian forests enhancement;
Independent Environment Assessment of the whole project

The Environmental Assessment includes an analysis of “Bulgaria -Forest Development Project”, Pilot Project “Forest sector: fuel switch”, and the proposals from the Restructuring of National Forestry Board and state forest administration Study.

Independent Social Assessment of the whole project

As part of the project preparations, the Social Assessment (SA) was undertaken in order to identify and analyze potential social issues and impacts of the project on key stakeholder groups and to guide the design of the project so as to maximizing its social benefits.

To understand the social dimensions of the proposed project the project team has, *inter alia*, held a number of meetings with stakeholders, conducted in-depth interviews of relevant representatives of various stakeholder groups, and collected public feedback on the project design, its components and the Environmental Assessment report. In addition, a Social Assessment study is being conducted by local social science experts with a strong focus on risk and vulnerability. Relevant field surveys were conducted using quantitative and qualitative research methods.

The overarching objective of the above activities is to: (a) assess the existing social conditions; (b) determine the potential negative impacts of the project; (c) serve as a vehicle for community consultations on the project; and (d) inform the public about the ongoing project design, including the proposed restrictions of access, and (e) identify possible types of measures to mitigate the adverse impact of the proposed restrictions on the livelihoods of the affected people. The results of the Social Assessment will be used to refine the design of the project, enhancing positive impacts and mitigating likely adverse effects. Some of the main findings of the Social Assessment with regard to the potential adverse livelihood impacts include:

- *Illegal Logging Surveillance and Monitoring;*
- *Strengthening the System of Forest Nature Parks.*

Feasibility Study on Fuel Switch Project

The project of USD 891 660 has been approved by the Japan Trust Fund Climate Change Initiatives at the end of 2002. “Forestry: Fuel Switch” Pilot Project will be implemented in accordance with the joint implementation mechanism of the Kyoto Protocol. Certain quantities of greenhouse gas emissions will be reduced through the realization of two main tasks: the construction of heating systems, using wood biomass from thinnings instead of conventional fuels, and afforestation with fast-growing species of 60 ha for energy purposes.

The investigations before the beginning of the Fuel Switch Project was completed during the period November 2003 – January 2004.

Results

- NFPS was finished and accepted by the Government in October 2003;
- Project for restructuring forest sector was finished and accepted by the Government in November 2003;
- The NFPS, the Project for restructuring Bulgarian forest sector, the suggestion about new law for creating a National Forest Company and suggestion for amendment of Forest law was submitted to the Parliament in December 2003;
- Till now the above mentioned suggestions didn’t accepted by the Parliament, because of different political decisions;
- In the framework of whole preparation of the Project was implemented the following consultants investigations:
- Study for restructuring of NFB and the state forest administration;
- Preparatory Study for Bulgaria Forest Development Sector;
- Environment Assessment of the whole project;
- Social Assessment of the whole project;
- Campaign for open conversation and public relations;
- Preparation of strategy for fund Protected territories;
- Development of tasks for plans for management of 4 natural parks and 10 protected areas.

- For fulfilment the preparation of the project the World Bank submit to Bulgaria the following free grants:
  - Free grant from the Japan Government in the amount 564,270 US $;
  - Free grant from GEF in the amount of 340,000 US $;
  - Free grant from the Japan Trust Fund Climate Change Initiatives for implementing the Fuel Switch Project in amount of 891,660 US $;
- The Bulgarian co-financing amount to 11.8 mln. Euro.
- The preparation of the Bulgaria Forest Development Project finished in February 2004, but as National Assembly didn’t authorize the Government for negotiations, the Project was frozen by the World Bank.
SWOT ANALYSIS OF THE UKRAINIAN FOREST LEGISLATION DEVELOPMENT

BY VITALIY STOROZHUK AND SERGEY KRYRYLYUK

The SWOT analysis is an effective way of analyzing potential by identifying Strengths and Weaknesses and examining the Opportunities and Threats.

The main directions of the analysis correspond to certain time periods in the development of the legal framework. This means that every direction was legally conditioned by adoption of a certain legal act specifying the basis for regulation. Now all indicated processes are in dynamics and the purpose of the work is to evaluate condition of the forest law system before adoption of the new Forest Code.

SWOT analysis is supplemented by the Analytic Hierarchy Process (AHP). The idea in utilizing AHP within the SWOT framework is to systematically evaluate SWOT factors. Results of an AHP are to find overall (global) priorities of decisions alternatives.

Analysis of the development of the forest law of Ukraine is carried out according to the following directions:

1. Regulation of the use of forest resources;
2. Initiation of the land reform: development of different forms of the land ownership and use;
3. “Nationalization” of the forest fund and state regulation of forests;
4. Constitutional-Presidential reform: on the way to privatization and emergence of communal reform for the forest fund lands;
5. State programs of economical and social development;
6. Forest legislation before the choice of pivot: elimination of contradiction between the land and forest laws.
7. Prerequisites for development of the new Forest Code: map of priorities.

1991 – Regulation of the use of forest resources

*Law on Protection of Natural Environment*¹ (LPNE) became the first law of the earliest Ukrainian legislation. This law specified the fundamentals of nature conservation and basis for land and forest legislation. Forests as the property of Ukrainian nation (Article 4 of LPNE) are subject to state protection and regulation of their use (Article 5 of LPNE).

Among main principles of natural environment protection pointed that general use of forest resources is free of charge while special use of natural resources for economical activity is payable (Article 3, 38 of the LPNE). Provisions on the special use of forest resources are regulated by the Forest Code (Article 48-51 of FC-1994).

Payment for special use of forest resources is established on the basis of norms for payment and limits of their utilization (Article 43, LPNE).

Fee for special use of forest resources includes a land tax for the lands allocated for forestry in keeping with the Law “Payment for Land”² (Article 7, 10 of LPL). Payments for special use of forest resources are collected for forest resources of state and local significance (Instruction for Collection of Payments for Special Use of Forest Resources and Use of the Land Plots of the Forest Fund³ – item 1.6)).

It would be natural to consider forests allocated for use to state enterprises as the forest resources of state significance while the forests allocated for use to non-state organizations as the forest resources of local significance. However, the Forest Code of Ukraine classifies the

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¹ June 25, 1991 №1264-XII
² July 3, 1992 №2535-XII
³ registered in the Ministry of Justice of Ukraine on November 15, 1999 №785/4078
wood from final felling as forest resources of state significance and the rest of forest resources as of local significance (Article 7 of FC-1994). Payment for use of forest resources of state significance is channeled to the state budget in full (in line with the Budget Code) while the payment for the use of forest resources of local significance goes to the local budgets (Article 91 of the FC 1994). Now in view of the emergence of private and communal property for the forest fund lands the current definition of forest resources is inappropriate. Its change will inevitably cause the changes in the procedure for calculation and collection of payment for special use of forest resources and subsequent redistribution of financial flows to the state and local budgets.

1992 – The land reform launching: development of property forms and land uses

*Land Code of Ukraine*\(^4\) eliminates exclusive state ownership and introduces state, collective and private ownership on land (Article 4 of LC 1992). Land use may be permanent or temporal (Article 7 of LC 1992).

The declared opportunity of transfer the forest fund lands into temporary use was implemented in the Carpathian region of Ukraine. However, due to the absence of the developed legal mechanism for transfer the local authorities have reduced the functions of disposal of land to distribution of the prescribed cut areas among forest users. In the rest of Ukrainian oblasts the local governments dispose of land traditionally what preserve the departmental approach to regulation of forest and forestry.

The land reform initiated in Ukraine has set a task to redistribute the state lands with their simultaneous transfer to the private and collective ownership (Decree of the Cabinet of Ministers of Ukraine “On Land Reform”\(^2\)). The lands of agricultural designation have been transferred to the collective ownership (Article 60 of the LC 1992) while the lands of the forest fund remained in the state property but in the economical cycle of the newly formed agricultural entities.

Since the legal status of the part of forest lands has changed the state land cadastre has included a provision on providing data about the lands to the concerned enterprises, organizations and citizens (Section 95 of the FC 1994). However, current provisions of the state forest cadastre are regulated by the Forest Code together with the provisions on the state forest census (Article 95 of the FC 1994), which gives it the format of the cadastre of natural resources but not a component of the land cadastre.

1994 – “Nationalization” of the forest fund and state regulation of forests

*Forest Code of Ukraine* was adopted as a program document for the nearest perspective and it was little hope that it will be effective during a decade.

The Forest Code defines the forest as ecosystem (Article 3 of the FC 1994). Legal relations of use, regulation and organization of forestry are regulated in relation to the forest fund lands (Article 4 of FC 1994) and forest resources (Article 7 of the FC 1994) but not in relation to specifically forests. The Forest Fund of Ukraine does not include the category of agricultural forests even in the new formulation of their successors.

The problem of forest ownership is resolved in the Forest Code unambiguously – all forests in Ukraine are owned by the state (Article 6 of the FC 1994).

The issue on the use of the forest fund lands is considered in the Forest Code in a great detail. Land plots of the forest funds are transferred for the permanent use to the forest enterprises that have special departments for silvicultural activities. The rights to own and dispose of forest resources are vested to the local governments (Articles 11-16 of the FC 1994).

The later Law of Ukraine “On Land Rent”\(^6\) delegates the right to let out the state ownership lands to state local administrations. This implies that the transfer of lands to different uses –

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\(^4\) edition of the law of Ukraine №2196-12 of March 13, 1992

\(^2\) December 18, 1990, №563

\(^6\) October 6, 1998, №161-XIV
temporal and permanent - would have been implemented by different branches of power. This contradiction was only removed by the Land Code 2001 (Article 123, 124) delegating all functions on disposal to the state local administrations.

Basically, poorly developed normative and methodical framework has led to the absence of the institute of rent on the forest fund lands in Ukraine.

1996 - Constitutional-Presidential reform: on the way to privatization and emergence of communal ownership on the forest fund lands

*The Constitution of Ukraine* defines land and natural resources as the objects of the ownership right of Ukrainian people (Article 13, 14 of CU). The Law of Ukraine “On Property” 7 regulates the provision on the ownership of the natural resources similarly (Article 9 of LP). The people of Ukraine as the owner could have resolved the issue on the legal status of natural objects (including forests), but failed to do it.

The ownership relations in Ukraine were reformed mainly not in compliance but in contradiction to the current legislation. This happened, first of all, because changes in the ownership relations proceeded much faster in reality than in legislation. The enactments of the President acted as a driving force of the legal reform, in particular in formation of the collective property. One of the most important is the Enactment “On Urgent Measures on Acceleration on Reformation of the Agrarian Sector of Economy” 8 (1999) that liquidated kolkhozes and laid a foundation for private property in Ukraine.

Similar situation is being developed now with the reform in the forest sector when in the beginning of this year the President issued two enactments “On Additional Measures on Development of Forestry” and “On the Measures on Strengthening of State Control in the Sphere of Protection, Safeguard, Use and Regeneration of Forests”.

The Constitution of Ukraine introduced communal ownership on lands and natural resources recognizing them as financial and material basis for local governments (Article 142 of CU). The law of Ukraine “On Local Government” 9 has developed provisions for organization and activities of local governments. Among achievements of the legislative system one should mention a clear division of authorities of the local governments and local state administrations (the Law of Ukraine “On Local State Administrations” 10).

However, distribution of authorities of different branches of power is not yet supported by demarcation of the lands of state and communal ownership. The new draft law “On Demarcation of Lands of State and Communal Ownership” 11 was considered and adopted by the Parliament of Ukraine in July 2003, however later this law was returned by the President of Ukraine to the Parliament for repeated consideration. The Parliament did not overcome the Presidential veto, so the legal status of former “kolkhoz” forests is still undecided.

Today part of the enterprises involved into forest management in agrarian forests has the communal status. It means that in Ukraine one can observe the process of so-called “public restitution”, that is transfer of state forests which were in charge of former collective agricultural enterprises into the ownership of territorial communities.

2000 – State Programs of Economical and Social Development

Change in financing of the branches of economics was conditioned by the adoption of the Law of Ukraine “On State Projection and Development of the Program of Economical and Social Development”. The law specified that the development of economical sectors will be regulated in the frames of the developed state programs. The development of the state programs and calculation of their financial support have become the main factors for budget

7 February 7, 1991, №697-XII
8 December 3, 1999, №1529/99
9 May 2, 1997, №280/97-BP
10 April 9, 1999, №586-XIY
11 adopted on July 9, 2003, №1061-IY
financing of expenditures for the economical sectors. Therefore, the programs developed in the next years become a specific form of planning of production volumes and corresponding state expenditures.

*State Program for Formation of the National Econet for 2000-2015*¹² (PFNE) has become the first example of planning of ecological measures and corresponding expenditures on the national level. Perspective targets of the program, in particular, optimization of the elements of Econet; reservation and further propagation of the status of reserved territories; optimization of forest management with regard to conditions for existence of local flora and fauna species were not strengthened by the sufficient economical justification of the proposed measures (Section 1, Part 2 of PFNE). It is important that the forests are classified as structural elements of the Econet. Besides, increase of the area of nature reserves is directly related to forest management because the most of the territories planned for reservation are covered with forests.

The *State Program “Forests of Ukraine”*¹³ for 2002-2015 (PFU) is more economically realistic. Increase of the volumes of silvicultural works is provided. It is planned to finance these works from the state budget as well as from the own means (incomes from economical activities) of forest users (Part 1, Section 4 of PFU). In this case the targeted resources for forest management from the state budget are channeled to the State Committee of Forestry and the Ministry of Agrarian Policy, while expenditures for implementation of the Program for other bodies of executive power are to be considered in the limits of their budgets (Section 1, section 4 of PFU).

However, comparison of the planned measures indicates that the programs “Forests of Ukraine” and “Formation of the National Econet” are not coordinated. One of the reasons is in the fact that these documents were developed by different state authorities. The Program “Forests of Ukraine” is characterized by an intention to evaluate the real sizes of future expenditures at the stage of planning. In any case, after evaluation of the first results of the implementation the further specifications of programs are to be expected.

2001 – Forest legislation before choice a pivot: elimination of contradiction between the land and forest laws

*The Land Code of Ukraine*¹⁴ (LC 2001) adopted in the end of 2001 marked a switch from the departmental regulation of forests to the regional when the right to dispose of forest fund lands are delegated to the local state administrations. The rent is recognized as the only form of temporal use of the forest fund lands (Article 93, LC 2001). Only state or communal enterprises have the right to receive lands of the forest fund for the permanent use (Article 93 of LC 2001). At the same time, as it was already indicated, the law on demarcation of the land of state and communal ownership has not yet been adopted.

Citizens and legal persons have the right to receive the closed land plots of the forest fund of the total area up to 5 hectares from the agricultural or farming or other entities (Article 56 of LC 2001).

But the procedures and reasons for alienation of small land plots of the forest fund into the private property are not specified in the Land Code.

That is why this process proceeds rather slowly. Instead, one can observe more and more cases of the transfer of lands of the state forest fund into the long-term rent (up to 50 years), which can be viewed as the process of hidden privatization.

The Land Code has not resolved the contradictions related to the notion of the forest fund (Article 18, Section 2, Chapter 11 of LC 2001). Development and content of the Forest Code specifically depends on definition of forests, forest lands and forest fund. The corresponding complexities have become one of the reasons for delay in adoption of the new Forest Code.

¹² approved by the Law of Ukraine of September 21, 2000, №1989-ІІІ
¹³ approved by the Decree of the Cabinet of Ministers, April 29, 2002, №581
2004 - Prerequisites for development of the new Forest Code: map of priorities

So, we have evaluated the main directions in the development of the Ukrainian law in general. The application of SWOT analysis is enough for determining the changes that should be introduced into legislation. At the same time it is important to evaluate the priority of every factor in the total system of priorities that is to determine the urgent problems to be resolved. For this purpose let us generalize the SWOT table of elements for development of the forest law (Fig.1).

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• General forest use is free, special forest use is payable</td>
<td>• Tariffs for forest payments are established by indexing but not by determination of rent</td>
</tr>
<tr>
<td>• Development and adoption of state programs for development of forests and forestry</td>
<td>• The absence of normative base and the institute of rent</td>
</tr>
<tr>
<td>• State and communal enterprises receive land plots into permanent use</td>
<td>• Local power bodies received the right of disposal of land of the forest fund</td>
</tr>
<tr>
<td></td>
<td>• EU Directives were not taken into account under development of new Forest Code</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Forests are subject to state guarding and regulation of use</td>
<td>• Legal relations of forest use and management are regulated in terms of plots of the forest fund and forest resources but not in terms of forests</td>
</tr>
<tr>
<td>• Development of different forms of property for forests (communal and private)</td>
<td>• Demarcation of the lands of state and collective property has not been implemented</td>
</tr>
<tr>
<td>• Forests are a component of the National Ecological Net</td>
<td>• Change of departmental approach of forest management to regional</td>
</tr>
<tr>
<td></td>
<td>• Transfer from administrative-economical to administrative methods of governance</td>
</tr>
</tbody>
</table>

**Figure 1 - A result of SWOT analysis: prerequisites for development of new Forest Code**

Additional value from a SWOT analysis can be achieved by performing pairwise comparisons between SWOT factors and analyzing them by means of the eigenvalue technique as applied in Analytic Hierarchy Process (AHP). When applying AHP a hierarchical decision scheme is constructed by decomposing the decision problem into its elements. The scheme applied in this study is similar to application of such hybrid method for forest certification case conducted in Finnish Forest Research Institute\(^{15}\).

Numerical techniques are used to derive quantitative values from verbal comparisons in two steps (Table 1):

1. Pairwise comparisons between factors are carried out within every SWOT group and relative local priorities of factors are computed using the eigenvalue method;
2. Pairwise comparisons are made between the four SWOT groups directly and also thorough scaling factors, i.e. factors with highest local priority from each group.

Results of the AHP for priority of the factors within the group has shown that positive factors play an essential role: state programs for development of forests and forestry representing strength, development of different forms of ownership and state guarding of forests representing the opportunities. Only one weakness on allocation of lands by the local power bodies connected with a threat of the switch from the departmental forest management to the regional one belongs to the top five groups.

\(^{15}\) M.Kurtitila et al. / Forest Policy and economics 1 (2000) 41-52
<table>
<thead>
<tr>
<th>SWOT group</th>
<th>Priority of group</th>
<th>Priority of key group factor</th>
<th>SWOT factors</th>
<th>Priority of the factor within the group</th>
<th>Overall priority by priority of group</th>
<th>Overall priority by the priority of key group factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengths</td>
<td>0.21 0.28</td>
<td></td>
<td>Special forest use is payable</td>
<td>0.213</td>
<td>0.046</td>
<td>0.060</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Adoption of state programs on development of forests</td>
<td>0.470</td>
<td>0.101</td>
<td>0.131</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>State and communal enterprises receive forest areas into permanent use</td>
<td>0.317</td>
<td>0.068</td>
<td>0.088</td>
</tr>
<tr>
<td>Weak-nesses</td>
<td>0.26 0.30</td>
<td></td>
<td>Normative payments for forests are established by indexing</td>
<td>0.204</td>
<td>0.053</td>
<td>0.060</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The absence of normative base and rent institute</td>
<td>0.295</td>
<td>0.076</td>
<td>0.087</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Local power bodies received the right to dispose of lands of the forest fund</td>
<td>0.330</td>
<td>0.085</td>
<td>0.098</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EU Directives were not taken into account under preparation of new Forest Code</td>
<td>0.172</td>
<td>0.044</td>
<td>0.051</td>
</tr>
<tr>
<td>Opportunities</td>
<td>0.14 0.17</td>
<td></td>
<td>Forests are subject to state guarding</td>
<td>0.393</td>
<td>0.056</td>
<td>0.067</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Development of different forms of property on forests</td>
<td>0.440</td>
<td>0.063</td>
<td>0.075</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Forests are a component of the National Ecological Net</td>
<td>0.168</td>
<td>0.024</td>
<td>0.029</td>
</tr>
<tr>
<td>Threats</td>
<td>0.39 0.25</td>
<td></td>
<td>Functions of forest use are regulated in terms of the forest fund lands</td>
<td>0.291</td>
<td>0.112</td>
<td>0.074</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Demarcation of communal and state property lands is not done</td>
<td>0.246</td>
<td>0.095</td>
<td>0.063</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Change of departmental approach of regulation of forest management to regional</td>
<td>0.315</td>
<td>0.122</td>
<td>0.080</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Transfer from administrative-economical to administrative methods of governance</td>
<td>0.147</td>
<td>0.057</td>
<td>0.037</td>
</tr>
</tbody>
</table>

Determination of the general priorities of the SWOT factors both through priority groups and through scaling factors has shown the necessity to consider a number of threats: resolution of the problem of the forest fund and demarcation of the lands of state and communal ownership.
Undoubtedly, elaboration and adoption of the state programs for development of forests is a key element for further development of the forestry and legislation.
The whole situation is easily observed by referring to Fig. 2. The factors are arranged in such a way that the factor possessing the highest global priority is the outermost point.
Figure 2 - Graphical interpretation of the results of pairwise comparisons of SWOT groups and factors (by the priority of key group factor).

In this situation high priority issues related to decentralized tendencies, namely transfer of rights for disposal of the lands of forest fund to local power bodies and change of the departmental approach in forest regulation to the regional (development of the model when production functions are concentrated at the level of oblasts while the center plays a role of coordinating and controlling organization) have indicated that exactly these issues are the main issues of the new Forest Code.
THE ARMENIAN FOREST CODE - STATUS AND RECENT DEVELOPMENTS

BY PETER HERBST

Introduction

The current Forest Code of the Republic of Armenia, adopted on 11 October 1994, is the result of a trip to Moscow by some Armenian Ministry of Agriculture staff, where this law was drafted based on the previous law (1978 Forest Code), without too many considerations towards necessary adaptations to on-going changes – especially regarding the political and economic situation of the country and its inhabitants. It is therefore a typical Soviet Union style forest law, where all well-known shortcomings of such laws in the context of weak institutions and administrative framework, uncertain institutional roles and responsibilities, unstable internal and external governance and bad economic situations become visible and easily are analysed.

A thorough analysis of that law, based on comparison with other countries with economies in transition from central planning to market orientation and consideration of the specific Armenian situation, led to the formulation of some core assumptions regarding the Armenian Forest Code:

• The Armenian Forest Code actually is not a forest code, but a "State Forest Fund Lands Management Code".
• The Forest Code should include such provisions only, that apply to forests, their management or protection; any provisions relating to non-forest fund lands must be removed.
• The Forest Code must be fully applicable to all forests of Armenia, irrespective of ownership or administrative categorisation.
• A clear technical definition of the term "forest", based on objective criteria, is necessary to decide in the field, if or not the Forest Code is applicable on a certain area.
• There are no – technical or legal - reasons why forests should be the exclusive property of the state.
• There are no – technical or legal - reasons why all forests of Armenia should be considered as protection forests.
• The separation of regulatory from managerial state functions is essential.
• The role of local self-governing bodies within the system of forest administration needs to be clearly defined.

These are just some of the assumptions which were elaborated and checked by the Legal Working Group of the SIDA funded FISP (Forest Institutional Support Project) Armenia during 2004 when drafting a new Forest Code which currently is under revision by a parliamentary commission; preparation of draft core forest regulations, as on "Forest Management and Inventory" or on "Community Forest Management", are due in the near future.

Underlying principles of the draft new Forest Code as well as possible solutions of outlined problems are presented in that paper.

"State Forest Fund Lands Management Code"

The Armenian Forest Code actually is not a forest code, but a "State Forest Fund Lands Management Code", which due to the absence of a real Forest Code (in Armenia) includes a lot of forest related provisions.
The proportion of non-forest forest fund lands within the state forest fund is high (more than 30%); consequently, agricultural production is a real issue in forest management and forest legislation, alike. There is a broad range of duplications and contradictions of regulations on the management of such areas found in the Forest Code as compared to the specific legislation (agricultural/water/land laws).

Consequently, only regulations which apply to forests, their management or protection etc. would be retained in the Forest Code, whereas all provisions relating to non-forest forest fund lands (as e.g. Art. 35 of the 1994 Forest Code on "hay making") have been removed from the forest law. At the same time, no forest related terms would be defined in any other legislation than the Forest Code, in order to avoid duplications or possible contradictions.

The new Forest Code necessarily will be fully applicable to all forests of Armenia, irrespective of the ownership or their administrative categorisation, which includes forests in protected areas, too. In the case of forests in protected areas, however, the Forest Code relates to stricter regulations in laws as the Law of RA "On Specially Protected Natural Areas" (cf. also Art. 39 of the 1994 Forest Code).

Technical Definition of Forests

It is one of the basic problems of the 1994 Armenian Forest Code that
a) a clear and logical definition of forests, and consequently
b) a technically logical land use categorisation system, based upon that definition, are absent.

As a result of this, no logical order of regulations could be achieved so far.

Consequently, a clear technical definition of the term "forest", based on objective criteria, has been introduced in the draft, to enable foresters to decide in the field, if or not the Forest Code is applicable on a certain area.

The biological definition of “forest”, as found in the preamble of the 1994 Forest Code, defines forest as one of the geographic elements of the landscape; the interconnected and interrelated unity of trees, other vegetation, soil, animals and micro-organisms with environment. This is just a political statement, with no practical value in terms of a forest legal framework. All land categorised under the forest fund is considered to be "forest", no matter if it is under forests or not, based on a simple administrative act.

"Forest", according to the draft, also includes areas which are temporarily not covered with forests (as a result of human intervention or natural causes, following their management or natural cycle), but which are expected to revert to forest in relation to the technical criteria (e.g. clear-cuts).

Forest Ownership

All forests of Armenia currently are state owned. At the beginning of the 19th century, all forests were privately owned. After joining Russia (1828), part of the forests was considered a property of the Russian Empire, yet substantial areas were left under the responsibility of the communities, private landowners and churches. Under the Soviet regime, forests became state property, with forest areas located in the vicinities of the villages being transferred to collective and state farms (kolkhozes and sovkhozes). In 1994, more than 50,000 ha of forests belonging to the (former) state and collective farms were transferred to the state forest fund.

According to the 1994 Forest Code (Art. 3), the "forests of the Republic of Armenia are exclusively state property". This provision has no backing in basic Armenian legislation, as the Constitution of RA does not know the state’s exclusive right of property towards forests, and consequently the Civil Code of RA considers the forests to be a real estate, towards which there may be different types of property. Therefore, private forests can exist in Armenia as well, which has been provided for in the new draft.
Periods of lease agreements as regulated by the Forest Code (maximum of 10 years) are too short in forests where the rotation periods are 100 to 150 years; one approach would be to lease state forest land for an unlimited period, where the ownership of the land remains with the state, whereas the ownership of the trees planted on that land is vested with the one who planted them. The big advantage (or risk) of that approach would be that termination of such unlimited lease agreements would still be possible when the lessee uses the property in a manner contrary to the terms of the lease; on the other hand, in the case of fully privatised parcels of state forest lands, simple enforcement of the regulations of the Forest Code would provide for the same effects. Acknowledgement of the core importance of tenure security led to favouring of full property rights, where the owner of the land necessarily also is the owner of the trees.

Many of the functions and obligations that are vested with the forest users according to the Forest Code have been shifted towards forest owners now, when provided for private forest ownership. The forest owner is the central figure in forest management, and as such the direct counterpart of the supervising and out-reach authority in the forest:

- Externally, the forest owner will be fully responsible for all that happens in his forest;
- Internally, however, he will be in the position to delegate this responsibilities (e.g. by contract under the private law).

The state is just another forest owner. In the case of state forests, rights and duties of the owner of the forest under the Forest Code apply to Hayantar, the legal entity which has been entrusted with the management of state forests. Hayantar was established under the commercial law, thus providing for clearly regulated, well known company structures, without any ownership functions in the state forest fund at all, but just management functions only.

**Protection, Production, Special Purpose Forests**

At the moment, according to Art. 11 of the 1994 Forest Code, besides social forests (for recreational use), all forests of Armenia are considered to be protection forests. In addition, there also are forests of special significance, which are even more protected as they are situated in specially protected areas.

The reason why all forests in Armenia are considered to be protection forests is that from the 1950s onwards, the domestic timber supply of the then SSR Armenia was fully covered through free concessions in Siberia.

The catastrophic earthquake of 1988, exacerbated by the collapse of the central planning system and the disruption of traditional trade with Russia and the countries of the former Soviet Union, led to a serious economic decline that was intensified by acute hyperinflation. The armed conflict over Nagorno Karabakh, accompanied by the trade blockade imposed by Turkey and Azerbaijan, and the internal conflict in Georgia, further aggravated the situation, placing the country in serious economic difficulty. This resulted in an energy crisis (about 50 percent of household energy during the last few years has come from fuelwood), which together with illegal logging of timber (evident lack of forest governance and the resulting levels of corruption in the forest sector) caused considerable degradation of forest areas.

Still, the huge domestic demand for fuelwood and timber has to be covered from somewhere (overall, there is less than 0,1 hectares of forest per person in Armenia). Because of different ecological as well as economical conditions, some forest stands need to be totally excluded from forest management, some need specific treatment, and others might be pure commercial plantations. Due to the huge extent of illegal logging in Armenia, protection of all forests seems to be practically impossible. Protecting efforts therefore need to be channelled towards such stands which really need protection.

Considering the actual ecologic as well as the potential economic situation on the ground (in the forests), there is no reason why there should not be production forests, too.
The basic requirement for the differentiation of production and protection forests is a clear set of criteria, laid down in the Forest Code. Based on the envisaged functions of forests, three classes of forests have been distinguished in the new draft, which are

- protection forests,
- forests of special significance, and
- production forests.

Protection forests are forests which are designated for protection of their own site, where improper management would cause deterioration of the site. Special purpose forests are forests where important public interest calls for a different method of management. Protection forests are established by virtue of the law, whereas forests of special significance are established by declaratory decision of the authorized state forest administration body. All remaining forests are considered to be production forests.

Restriction of use of forests, in order to provide for functions that are desirable in the public interest in the best possible way, is no big issue in state owned forests. Such restrictions for the owner of the forest in most cases, however, result in loss of income, additional costs, or even damage, which in the case of non-public ownership calls for compensations. This is an entirely new concept for Armenia. Protection of such forests will be performed on the basis of a contract (under the private law), entered into between the competent Minister and the owner, specifying the obligations of the owner in protecting a forest area, and the obligations of the state in compensation for loss or damage and payment of additional costs.

Responsibilities in the field of forest protection would be shifted towards the forest owners who are obliged to take all necessary measures (corresponding to capacities).

**Data Collection in Forests**

National forest inventory and forest (management) plans are two entirely different things. To conduct a national forest inventory (= taksatija lesa) means to establish the actual state of forests on the territory of RA.

It has proven to be extremely important to be clear about terminology in that context, and to strictly distinguish forest inventory from forest planning. The old Austrian-Russian system of forest (management) planning is the one in use in Armenia, too. The English system of forest management planning is different, correct terms therefore are lacking, and thus translation in many cases is incorrect (this is true not only for Armenia); that’s why terms like "forest management", "forest management planning", "forest inventory" are found in the English version of the Forest Code, RA, when it should read "forest planning" (= Forsteinrichtung = lesoustroistvo).

In general, forest owners shall be obliged to tolerate the execution of necessary acts related to national forest inventory and to provide necessary information to the relevant state forest administration bodies. The legal basis for data collection, processing and distribution in that context necessarily needs to also provide for a clear, reliable and enforceable protection of data privacy, as compared to public information needs and claims. Enforceable protection of data privacy must be provided in that context, possibly in a regulation, where public use would be restricted to clearly specified open (non-sensitive) data – this would definitely exclude public access to sensitive data as growing stock, increment, annual allowable cut etc.

**Forest Transport**

Right of way in forests, again, was a new concept in Armenian forestry; now that more than just one ownership category are created, full accessibility of forests no longer can be assumed - whenever more than one forest owner’s land is involved when transporting wood from the stand to the truck road, a tool of coercive granting of the right of way over a third parties private land needs to be introduced (however, only if no other possibilities are economically viable, and at full compensation).
In general, all actions related to forest transport have to be conducted carefully, i.e. avoiding unreasonable damage to forests and forest lands. Construction and maintenance of forest roads (including skidding tracks) must not result in any danger to the stability of forest stands, increased risk of erosion or unreasonable damage to the soil and the water regime in the relevant area, which is, however, one of the core problems of forest management in Armenia today. Responsibility for construction and - especially - maintenance in the future would be vested with cooperatives of forest road users (which comprise the owners of all forests opened up by a certain road); the regulatory framework for that cooperatives would also be laid out in a regulation.

**Presence of the General Public in the Forest**

The provisions of Art. 21 of the 1994 Forest Code, stating the right of the general public to visit all forests and collect non-wood forest products for their own personal consumption (non-commercial!), are clear and adequate. Extension of this right to future private forests is expected. Future development, as
- mountain biking in the forests (e.g. in the context of more sophisticated forest roads construction and eco-tourism development),
- driving in general on and off forest roads,
- liability of forest owners for damages caused by inadequate condition of the forests (e.g. falling tree hits person walking through the forest), etc.,
were considered. Consequently, provisions of the draft new Forest Code now state that everybody shall be entitled to enter the forest at their own risk. While doing so, they shall be obliged not to damage the forest, not to interfere with the forest environment, and to follow the instructions of the owner / authorised manager of the forest and their staff.

A list of activities that are explicitly prohibited in the forests, as dumping waste, grazing livestock, felling or damaging trees, damaging forest sites, disturbance of regular forest operations, engagement in restricted recreational activities (as mountain biking) away from designated areas, etc., is still under discussion. This includes the owner's right to grant an exemption from such restrictions. Should such an exemption interfere with the rights of other owners, the authorized state forest administration body shall make the relevant decision.

**Separation of Regulatory from Managerial Functions**

Restructuring and institutional change of the Armenian forest sector are based on the well-known set of state functions (regulatory / supervisory / support / ownership).

With regards to the forest law, such new structures need to be reflected accordingly there, to create a dependable environment for future implementation of that functions:

- authority (regulatory, supervisory and support) in charge of all forests of Armenia operating on the basis of administrative law
- managing body managing Armenia's state forests operating on the basis of civil law (company law)

The theoretical legal basis for that separation within the law is that the
- managerial functions of a future State Forest Enterprise are to be dealt with under the civil law (private law, company law), as ownership function etc., whereas
- all administrative functions of a future (State) Forest Service Police Inspectorate are to be dealt with under the administrative law (public law), as control function etc.

Forest laws - by definition - obligatorily are administrative legislation matters.
Local Self-Governing Bodies

According to the RA Law "On Local Bodies", the local self-governing bodies are vested with certain rights of control over forests and their use; the nature and scope of that rights, however, is unclear. This resulted in considerable implementation problems. The role of the local self-governing bodies within the system of forest administration (especially control), therefore, has been identified and clearly defined in the draft new Forest Code, in relation to other authorities active in the same field.

Current Implementation Problems

The Government, as representative of the only and exclusive forest owner in the country, currently is unable to carry out its ownership function in a suitable manner, not the least due to financial difficulties. The State budget funding is limited, in particular for forest management. This is regrettable, as the Armenian forests at present are in great need of the state’s assistance. Furthermore, the limited state budget support forces the state forest managers to utilize the forests to a high degree and to as much as possible reduce the costs of logging and reforestation. This leads to over-utilisation in accessible areas, a lack of reforestation and failure to observe good forest management.

There is presently no relevant state budget allocation for improvement of forest infrastructure, forest inventory etc. This fact to some extent explains the different illegitimate and illegal activities in the forest economy, leading to substantial forest exploitation by individuals and enterprises with or without logging permissions. In addition to that, on the local level, massive unemployment, inaccessible prices of energy to major parts of the population, as well as livestock overgrazing in the forests as compensation for lack of animal forage and for inaccessible pastures and meadows, contribute to that exploitation.

The draft new Forest Code, backed up by the necessary regulations, is expected to relevantly improve that situation.
Abstract
The transition from collective to a market oriented economy has a direct influence on many aspects of social reality in Bosnia and Herzegovina (hereinafter: B&H). In spite of rapid changes in the global society regarding forests, forestry sector in B&H reacted fairly slowly. Considering the importance of forestry and wood-processing industry for the national economy, the new legal framework, aimed to satisfy changing requirements of the society towards forest, has been developed. Due to the specific administrative structure of B&H as well as adverse political environment, implementation of forest legislation is significantly aggravated. Today, two years after the promulgation of the Law on Forest in the Federation of Bosnia and Herzegovina (hereinafter: F B&H), the crucial provisions are not implemented yet. Forestry institutions at the Federal and Cantonal levels as well as Forestry Management Companies are not entirely established. It is clear that some improvements of the forest legislation have to be made to be able to ensure further developments of forestry sector in B&H. Thus, a number of formal and informal initiatives are developed to overcome this situation.

The aim of this paper is to contribute to the democratic dialogue concerning improvement of existing forest legislative. It deals with the most important issues such as ownership, management, administration of forest and forestlands and organisation of forestry sector, trying to analyse existing solutions critically as well as to offer possible improvements of forest policy in B&H.

Key words: Bosnia and Herzegovina, sustainable forest management, forest policy, forest legislation.

Introduction
After a lengthy procedure of reconciliation, the Law on Forests in F B&H (hereinafter: the Law) was adopted by the Parliament of the F B&H at the session of the House of Representatives held on 27th March 2002 and session of the House of Peoples held on 10th April 2002. Taking into consideration the importance of forestry sector for the national economy, the sole fact that total surface occupied by forests and forestlands in B&H amounts 53.4% of the total State territory, as well as the importance of multifunctional benefits from the forest, passing this Law represented a vital interest for the whole B&H society.

Two years after its promulgation, it is obvious that it has not given the expected positive changes in forestry sector in F B&H. For instance, creating of institutionally sustainable organisation of forestry sector is late or has not been coordinated, as there is no unique forest policy on the Federal level, Forestry Management Companies have not improved their own economical performances as the result of the Law implementation, the area covered by the forest is being reduced continuously following by a significant stagnation of afforestation and silviculture measures, the level of business transparency as well as professional supervision of management activities are unsatisfactory, the system of financing in forestry sector is insufficiently clear and therefore ineffective, etc.

A number of provisions and solutions of the Law are defined in such a way that their implementation could have very serious and far reaching, negative consequences for the further development of the forestry sector in F B&H. These defects, above all, apply to the issues of administration and forest management as well as the organisation of forestry sector.
Ownership, Administration and Management of Forests

The Law regulates that forests and forestland in FB&H shall be state-owned or owned by physical persons. Although formal, the adoption of the terms “state forests” and “private forests” would simplify and precisely define the two main forest ownership forms. Whatever, the Law defines that the state-owned forests on the territory of FB&H are the property of this entity. In exercising the rights pursuant to ownership of state forests and forestland, the Federation shall be represented by the Federal Ministry of Agriculture, Water Management and Forestry (hereinafter: FMAWF).

The position of FB&H as the sole owner of the state-owned forests in the Federation is also emphasized by the regulations according to which a certain forest shall be considered as state-owned forest even if Cantons or municipalities establish new forest, buy a forest or a forestland or receive it as a gift from any private natural or legal person after this Law has entered into force. From the above mentioned, it is clear that FB&H is the sole and legitimate owner of the state-owned forests in this entity, in spite of superficial and misinterpreting of the constitutional provisions, by which environmental policy and management of natural resources (including forests) fall under the jurisdiction of both, the Federal and a Cantonal authorities.16

Indistinctive provisions in the current forest legislation are those concerning administration of forests. According to the Law, administration of forests and forestland shall include support and control of economic functions and utilisation of forests and forestland, while management of forests shall include planning, protection, tending and utilisation of forests and forestland. Obviously, the Law does not make a clear distinction between these two key terms. Consequently, it is very difficult to understand analytically the competencies of the responsible authorities and to evaluate efficiency of the mechanisms/procedures aimed to administer and manage forest resources. Therefore, it is essential to correct the definition of forest administration as follows: “Administration of forests and forestland shall include the state (administrative) responsibilities as well as support and control of forests and forestland”. The definition of forest management should not be changed. These, formal changes in definitions are very important for further improvements of forest legislation related administration and management of forests.

According to the Law, the Federal Forest Office and Cantonal Forest Offices shall administer state forests under the conditions laid down in this Law. FMAWF shall, by contract, transfer tasks of management of forests and forestland to cantonal ministries. Regardless of ownership type (state or private), the right of administration or entrusting the administrative function to others belongs to the owner. Taking into consideration characteristics of some Federal units (Cantons) as well as the constitutional provisions related to competencies in natural resources management, FB&H can, to a certain extent, transfer its own administration rights to Cantons but not in the manner that would jeopardise its own ownership position. The existing legal solutions do not enable FB&H as the owner, to have a dominant role in administration of forests while Cantons have more important role in both, administration and management of forests. It is not logical that FMAWF, namely the federal Minister as the formal owner, simply entrust administration of its own property (in this case the forests and forest lands) to Cantonal authorities, without any compensation. Thus, the logical solution for administration of forests (as the Federal property) should be the institution on the Federal level; the only institution in that sense in FB&H is the Federal Forest Office.

It is already mentioned that the Law anticipates that FMAWF, by contract, transfers tasks of management of forests and forestland to cantonal ministries. The Cantonal Minister, by contract and through the Cantonal Forest Office, transfers tasks, duties and responsibilities related to forest management to the Cantonal Forestry Management Company. The possible

16 CODE OF CONSTITUTIONS OF B&H 1997
improvements here might be reduced to two solutions. The first one implies that FMAWF, by contract, transfer tasks of forest management not to cantonal ministries but the Federal Forest Office. Respecting the possible conflict of responsibilities within single institution (according to this solution the Federal Forest Office will be responsible for both, administration and management of forests), the second solution also imposes. According to this, the institution responsible for administration (the Federal Forest Office within the FMAWF) shall transfer, by contract, forest management activities and tasks to appropriate Cantonal ministries. This solution put the Federal Forest Office more into the owner position. In both solutions, the administration of the forests would be concentrated at the Federal level while the management of forest resources is responsibility of Cantonal authorities and Cantonal Forestry Management Companies. The first solution seems more realistic, with the provision that the Federal Forest Office would transfer certain management tasks to Cantonal Forestry Management Companies. In respect to management of state forest, these activities should include:

- Drawing up forest management plans and execution projects as well as ensuring their realization;
- Business operations of forest wood assortments and maintenance/construction of forest infrastructure;
- Executing programs of biological reproduction of forests and carrying out measures of integral forest protection;
- Production and trading of forest reproduction material and seedlings for horticulture;
- All economic responsibilities, benefits, tasks and decisions.

The Law also prescribes that the Cantonal Assembly shall establish one Cantonal Forestry Management Company for the area of the Canton. To have just one forestry enterprise is not the best solution, especially, because a unique management institution does not exist on the Federal level. Thus, implementation of this lawful provision is facing serious complications on the field. This is manifested through the fact that Cantonal Forestry Management Companies in some Cantons have not been established yet. There are great differences in the structure and the amount of capital, number of employees as well as the stage of privatisation process among certain forestry enterprises, which could become a part of the unique Cantonal Forestry Management Company. Within the Canton, one can find forest enterprises owned by the state, with a few hundreds of employees, forestry mechanisation, workshops, nurseries farms and even special purpose facilities (restaurants, hotels, etc.). On the other hand, there are forest enterprises with a few employees that do not have, even, their own office. All so-called non-strategic activities (feeling, skidding, transport, road construction and maintenance) and equipment (mechanisation, buildings) in such enterprises are privatised. Literal implementation of the existing legislative, towards the integration of enterprises with a different business environment and concept, in one Cantonal Forestry Management Company, would bring into an unpleasant situation some forest enterprises. In such situation will be particularly those enterprises that kept their employees, mechanisation and very often forests in expecting for unique and sustainable organisation solution in forestry sector of F B&H.

The Law prescribes Cantons as the administrative forestry units. The Entities’ boundaries in B&H in the most cases are nothing but the front line from the war while Cantonal boundaries are the result of post-war political negotiations. These are not natural but artificial splitting almost all previous forest management regions (established 40 years ago) into two or even more parts. Therefore, there are significant differences in sense of management and conditions of forest resources in some parts of the Cantons and it is necessary to manage forest in territorial sense, based on forest management regions and not respecting Cantonal boundaries. Particular difficulties for integration in the unique Cantonal Forest Management Companies might have so-called forest industry enterprises where forestry and

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17 SAKOVIC et al 2002
18 AVDIBEGOVIC 2004.
wood-processing industry are connected on this wise that heavily depends each other in organisational and revenue sense. Consistent implementation of the Law could, in such areas, result in ruin the local economy, loss of working places and social unrests. The only solution is in creating more Forestry Management Companies within one Canton. By doing so, management of forests would be organised according to the needs of Canton as well as lower administrative units (municipalities) respecting the specifics of long term forestry planning and traditional organizational solutions.

**Forestry Institutions**

With this Law the Federal Forest Office has been established within FMAWF. Together with Cantonal Forest Offices, this federal institution is responsible for administration of state forests in F B&H. Such a legal solution opens possibilities for a number of vagueness concerning forest administration between the Federal and Cantonal level, especially in enabling supervision and coordination of forest administration. Having in mind that within both, FMAWF and Cantonal ministries, forestry departments already exist, there is also an issue of responsibilities between these departments and Forest Offices.

Cantons shall conduct their administrative tasks, as laid down in this Law and regulations issued there, through the Cantonal Forest Office, established within the Cantonal Ministry. The Law also prescribes the responsibilities for both, the Federal Forest Office and Cantonal Forest Offices. There are a number of activities in which the jurisdiction of the Federal Forest Office and Cantonal Forest Offices overlap each other, for instance:

- Collecting data, maintaining database and establishing cadastre on the status and development of all forests;
- Confirmation and monitoring of the forestry management plan elaboration;
- Confirmation, registration and recording objects for production and processing of forest seeds and producers of forest and other trees and shrubs;
- Monitoring the forest health and the extent and level of damage to forest, providing forest reporting and prognostic services;
- Preparing professional opinions on establishment and revision of forest management regions;
- Preparing and giving opinions on proposals the forests to be declared protection forests or special purpose forests;
- Definition and implementation of the anti-corruption strategy etc.

The absence of a unique, independent forestry institution at the Federal level as well as the transfer of its authorization to the Cantonal institutions is precedent unknown in the organisation model of forestry sectors in neighbouring countries. Without such an institution, the Cantonal Forest Management Companies could become sluggish centres of local or regional forestry concepts. In such situation it would not be possible neither to plan nor implement unique forest policy. Having in mind the current administrative and political organisation of the state, from which originates lack of common strategy of development of forestry sector at the state level, defining and implementation of consistent forest policy imposes as the most important strategic question in forestry sector of F B&H.

Taking into the consideration the specifics and importance of forest resources, the needs to develop forest policy at the Federal level, the forest ownership pattern (the dominant state ownership) and the needs for clear separating of owner’s and administrator’s functions (and responsibilities), it would be more appropriate to organise the Federal Forest Management Office as an independent administration unit at the Federal level. Such an institution would be directly subordinated and accountable to the Government of F B&H. This institution would be financed from the special-purposes forestry fund from the Federal budget. All the incomes generated by the Federal Forest Office would also belong to the budget. Such an organisation model of administrative institutions at the Federal level is not unknown, as the same principle
has been applied for establishing of Federal Veterinary Office. According to the needs, the Federal Forest Office could have its departments all over F B&H.

In addition to the unclear vertical subordination at the Federal-Cantonal level, this model of organisation of forestry sector is very complicated, inefficient and indeed very expensive. A much more effective solution is a model where Cantonal Forest Offices would be revoked and their jurisdictions transferred to the Federal Forest Office. The proposed organisational model of forestry sector would not, in any way, endanger the interests of Cantons as the forest resources management, by establishment of Cantonal Forest Management Companies would be entirely concentrate on the Cantonal level.

Although it is regulated by the Law that forestry inspectors are authorized to review plans of basic and extended biological reproduction and their implementation, such a solution does not give effective results. Therefore, allocation and spending of funds for biological reproduction should be in the jurisdiction of the Federal Forest Office. According to the instructions of the international financial institutions (MMF, World Bank) and the Office of the High Representative for B&H (OHR), it is necessary for the reason of improvement of the transparency and establishing of vault way of business, to abolish the current funds for enhancement of forests and establish a much more effective and transparent way of forestry financing. In this sense, all compensations and assets mentioned above should be forwarded to the budget of F B&H.

Conclusion

Sustainable forest management implies a number of specific activities taking place on vast areas. Therefore, the principles of spatial and functional centralization of administration, management and financing in forestry are much more pronounced then in other economy branches associated with natural resources management. These principles are based on comprehension that forest management must have a common, long-term goal – the optimal management of natural potentials of forest ecosystems. Having in mind that forest management in B&H is based mainly on self-financing from the current selling of forest products, management of isolated forest areas or an area with lower natural potentials is simply unsustainable.

Focusing mainly on the state-owned forests, as the dominant type of forest ownership, this paper has critically analysed the most controversial issues in the current forest legislative in F B&H and has offered some solutions. Solving these problems based on professional bases and not on short-term political interests, might create the preconditions for improving of existing legislative framework. That way, the improved law on forests with its consistent implementation, might be a base for defining long-term forest policy that would result in sustainable forest management in accordance with the demands of B&H society. Besides, the forestry of B&H belongs to the European forest milieu and it should be treated as European interest. This attempt to stress the essence problems in forest legislation and to offer possible solutions is the minimum of corrections giving the chance to avoid more serious and negative consequences for B&H forestry in the future.

It is also important to say that all mentioned suggestions have been proposed to the Parliament of F B&H in the form of amendments but were not even taken into consideration. This tells us that forestry in F B&H is treated as a hostage of the current politicians who are disabling the further development of forestry sector.

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PARTICIPATORY APPROACH IN CREATION OF FORESTRY AND ENVIRONMENTAL LEGISLATIONS IN SERBIA

BY MIRJANA STANISIC, DRAGAN NONIC, DUSAN JOVIC

Introduction
Forest ownership and management along with forest and environment legislations were or still are under big changes in some transition countries of Central and Eastern Europe. However, forest and environmental sectors in the “countries with economies in transition” are not changing in a homogeneous way.

At the global and European level, during the past ten years or so, numerous fundamental international commitments and initiatives (conventions, resolutions, work programmes, strategies, guidelines, etc.) were developed and adopted in the field of sustainable development and biodiversity of forest ecosystems, and included in modern forest legislation and policy of the majority of European countries.

At the European level, the Ministerial Conferences on the Protection of Forests resulted in several resolutions. The international resolutions reflect the global demands for environmental protection, sustainable forestry, multiple-use forestry, and define the principal objectives and the main criteria for their realization. These resolutions, as legally binding instruments of sustainable development, have been signed by almost all countries in transition, which is consistent with their new policy and legislation, supporting the implementation of the international commitments and other results of the debates on forests.

Since the UN Rio Conference on Environment and Development in 1992, the need for interaction between forestry and society and the concept of public participation have been recognized as integral to Sustainable Forest Management (SFM). Pan-European countries further confirmed this in Resolution H1 “General Guidelines for the Sustainable Management of Forests in Europe” (Second Ministerial Conference, Helsinki 1993), and Resolution L1 “People, Forests and Forestry - Enhancement of Socio-Economic Aspects of Sustainable Forest Management” (Third Ministerial Conference, Lisbon 1998).

Changes in the way of maintaining the forests and acknowledgment of social, cultural, and environmental issues did result in creation of various international environmental and forestry policy agreements, which involve broader public to influence affairs related to environmental, natural and forest management issues. Related statements can be found e.g. in Agenda 21, Convention on Biological Diversity (CBD), UN Intergovernmental Panel on Forests (IPF), Resolution L1 on People, Forests and Forestry of the Third Ministerial Conference on the Protection of the Forests in Europe (Lisbon 1998), UN/ECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus, 1998), and other various documents on Pan European, European and EC level.

Thus, public participation in forestry can be defined as “various forms of direct public involvement where people, individually or through organized groups, can exchange information, express opinions and articulate interests, and have the potential to influence decisions or the outcome of specific forestry issues” (FAO/ECE/ILO Joint Committee, 2000).

Public participation should: increase public awareness of specific issues among the public; maximize the total benefits of forests and environment in offering opportunities and enhance the social acceptance of sustainable forest management through better informed and

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21 Article 23.2; 11.3.b.
22 Article 8j.
23 Proposal for Action 9 (NFP).
24 L1 General Guidelines
more widely accepted forest management outcomes, along with accomplishment of all environmental demands.

As for forestry, some of environment directives set out that the members of the public should have opportunities to express their opinion regarding environmental report, permit application or draft plan/programme, and to expand the rights to access to information. Among others, that is the case with Directive 85/337/EEC on the Assessment of the Effects of Certain Public and Private projects on the Environment\textsuperscript{25} (EIA Directive), Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment\textsuperscript{26} (SEA Directive), and Directive 96/61/EC on Integrated Pollution Prevention and Control\textsuperscript{27} (IPPC Directive). European Commission created them all. Since 1998 and creation of UNECE Convention on Access to Information, Public Participation and Access to Justice in Environmental Matters (Aarhus Convention), EC proposed among other things, changes of the EIA Directive and the IPPC Directive.\textsuperscript{28} The EIA and IPPC Directive are proposed to be amended. Amendments for EIA Directive imply e.g. wideness and clarification of the member state obligation to inform the public about the complete procedures and information’s regarding their opportunities to participate. According to the proposal, the IPPC Directive will be amended e.g. by clarifying which information should be made available to the public.

Policy and Legal Framework in Forestry

At the level of the Republic of Serbia, forestry policy is not clearly defined through the legislation, and not any official document, i.e. political statement, defines forestry policy clearly. Some elements of the policy are addressed by the Forest Law and some by general plans of forestry development.

The previous strategic objectives and directions of forestry development were mainly derived from the global strategy defined based on The Spatial Plan of the Republic of Serbia (1996/c), and The projection of forestry development till 2050 (1996/b). The principal objectives of forestry defined by the Spatial Plan of the Republic of Serbia, such as the improvement of forest condition and the increase of the forest cover percentage, are mainly directed to the production-economic function, which is not consistent with the requirements of modern forestry.

The projection of forestry development till 2050 was prepared in 1996, but its objectives can hardly be achieved in present conditions. This also refers to the objectives and tasks prescribed by the Spatial Plan of the Republic of Serbia, containing a “very ambitious plan in the sphere of forests and forest regions”, by which “forestry profession, science and forest management enterprises, are in charge of very complex tasks, which are several times, and some of them even ten times, harder than those executed so far, even under the best conditions” (1996/b).

In 1997, the Ministry of Agriculture, Forestry and Water Management published the document entitled “The strategy and development policy in Serbian forestry” (1997), which outlines the forest condition, objectives of management, expected effects of forest improvement (based on the previous documents), precondition for their realisation, investment demands and sources of financing.

This document did not exert a major influence, because it presents the well-known facts and the attitude prevailing during then (centralised) structure of forestry in Serbia, based mainly on the State planning, as the base of forest management, where it is clearly emphasised that “the State manages all forests and this role, rights and obligations are above all of its


\textsuperscript{28} [2001] Official Journal C154E, p 123.
rights (as the owner of a part of a forest, as the co-ordinate of development of individual branches and activities, regional development, etc).

Also, the Public Enterprise for Forest Management “Srbijašume” adopted the five-year plan document “Programme of forestry development” (1996/a; 2002), which present the planned frameworks of forestry development, and contain some elements of forestry policy. This is especially the case in the Programme of forestry development 1996-2000, which reflects the monopoly of the State Enterprise at that time, compared to the Ministry and other State institutions dealing with forestry in Serbia.

Based on the mentioned documents that present the elements of the previous forestry policy in Serbia, it can be observed that there was no political determination to formulate the directions of the new, modern forestry policy.

The cause of indefinite and contradictory statements in the formulation of forestry policy now days are, first of all, the unstable circumstances caused by permanent political changes, insufficient continuity and credibility of the leading persons for the creation of the new forestry policy. Also, there was no social consensus regarding the harmonisation of the social and economic courses with the changes occurring in other countries in transition.

Although Serbia, due to objective reasons, has not yet become the signatory state of all the international documents, it will be necessary to include the international commitments and initiatives in modern forestry policy and legislation, because of the future European integration.

By signing and ratifying the international documents, Serbia has committed itself to sustainable management of all forests, with the change of the traditional concept of sustainable timber production, and with equal (but not merely declarative) importance of forest ecological and social values. Therefore, in the framework of forestry policy, in addition to general guidelines, it is also necessary to emphasize the special economic, ecological and social objectives.

Need for the new Forestry Law in Serbia is for a long time requested also by the competent authorities, since the current law (1991) do not provide adequate possibilities for introduction of provisions needed for contemporary reform of forestry sector.

Current Law on Forests from 1991 is based on the old forestry concepts and was made for past and outdated political, social and economic conditions. It does not imply or call for any of adopted Resolutions or development concepts originating from various international meetings starting with Rio de Janeiro (1992), on protection and sustainable environment, natural resources and forest management.

In the Law on Forests, there is even lack of attitude implications regarding the 64 International Conventions and Agreements, ratified by ex Yugoslavia (SFRY and FRY) and obligated for State members (Serbia and Montenegro).

Additionally, by adoption of so called. “Omnibus Law” in Parliament, assumptions for the creation of Public Enterprise for forest management “Vojvodinašume” on the territory of Vojvodina were created. But, that was in contrariety with the present Law on Forests, by which the management of state forests as a part of forest areas is predicted to be done only by one forestry enterprise in the Republic, and that is PE “Srbijašume”. Also, one of the problems is existences of other laws, which refers to the forests and forestry, and are not completely harmonized with current Law on forests.

Beside mentioned deficiencies, it is obvious that the provisions of Law on forests are mainly directed to the state forests and relations between state and users of state forests, and do not dispute needs of private forests owners. Also, it deals mainly with the production of wood for commercial forestry, and do not adequately treat issues as development of nature protection, tourism, recreation etc.

29 Serbia is, until now the signatory state of Strasbourg and Vienna Resolutions.
31 Law on Determining Specific Jurisdiction of the Autonomous Province, Official Gazette, No: 6/02.
The lack of clear forestry policy and programs, lack of standardized forest codes according to the European norms, and the weakness of current institutions and organizations, have influence also on the insufficient usage of all available forest resources and potentials, especially in the private forest sector.

Participation process in creation of the forestry policy and Law

One of the most important elements in creation of the Forestry Policy and Law is to enable and improve awareness and participation of the public. Thus, public participation did become essential part in the first stage of their creation in Serbia. This working paper will present undertaken actions regarding participatory approach in creation of forestry policy and law.

Consistent with the activities in other European countries, which in the past few years reformed or updated their forestry policy and law, aiming at the harmonisation with the international commitments and changes, the former Ministry for the Protection of Natural Resources and Environment and the Directorate of Forests in Serbia32 have also expressed the need to identify future development of the political and legislation framework of forest sector.

In this aim, FAO established the project TCP/YUG/2902 (Institutional Development and Capacity Building for the NFP of Serbia) in 2003, as the support to the establishment of the modern forest administration in Serbia.

Till now, the process of the draft forestry policy and law development did include:

1. acquisition and analysis of the most important documents of the actual national policies, strategies and laws relevant to forestry and the related sectors, from the countries in transition and the European Union countries;
2. acquisition of the most important global and European conventions and resolutions (Ministerial Conference on the Protection of Forests in Europe, Criteria and Indicators of Sustainable Management of Forests, UNFF recommendations, etc.), and the analysis of the Government commitments to the implementation of the international conventions and/or agreements relevant to forestry, ratified by Serbia;
3. analysis of questionnaires scores submitted to all important stakeholders;
4. two workshops on forestry policy, in Novi Sad and Belgrade;
5. a series of interviews with the most important decision makers in forestry sector and in other significant sectors (agriculture, rural development, environment, education);
6. Establishment of working groups for the development and adoption of forestry policy and law.

The first workshop on forestry policy and law was held on February 24th, 2004 in Novi Sad. The participants were the responsible representatives of all the major forestry institutions from the territory of Vojvodina. Venn and H-diagram methods processed the answers to the question “How do you evaluate the state policy to forests?” The feedback pointed to some of the main priorities of forestry policy and strategy (establishment of the Ministry of Forestry and Hunting, better application of legal regulations, increase of forest cover percentage, reduction of the political influences, etc.). It can be concluded that the local and conservative approach to forestry is still present in this region, with insufficient information on the global processes and international requirements of modern forestry.

The second workshop on forestry policy and law was held on March 10th, 2004 in Belgrade. There were 26 participants from various institutions in the field of forestry and environmental protection in Serbia (Directorate of Forests, Ministry of Agriculture, the Headquarters of the State Enterprise “Srbijašume” and 6 Forest Estates, Institute for Nature Conservation of Serbia, National Parks “Tara” and “Đerdap”, Institute of Forestry, Forestry School Kraljevo, Faculty of Biology and Faculty of Forestry). The participants were divided into 7 mixed groups. The Venn-diagram method was applied to present the relationship between the Directorate of

32 In February 2004, the Directorate of Forests was transferred back to the Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia.
Forests and other stakeholders in Serbian forestry, and then H-diagram method was applied to the answers to the question “How do you evaluate the state policy to forests?”

The following positive aspects have been identified: long tradition of the organized forestry in Serbia, establishment of the Directorate of Forests, delimitation of forestry and wood processing, engagement of young professionals, becoming a party to international organizations, etc.

The negative aspects of the attitude of the State to forests are: unsatisfactory position of forestry compared to other sectors, insufficient efficiency of the implementation of the law, unsatisfactory penalty policy, cancelling of the Forest Fund and the shortage of finances, centralization of forest management and financing, unequal position of all owners and inadequate measures in private forests, insufficient information of the local population, unsatisfactory co-operation with the scientific institutions and insufficient investment in the extension work.

The measures for the achievement of common objectives have been proposed, as well as the list of priorities of the State policy related to forestry. The most important objectives are as follows:
1. development of the National Forest Programme;
2. establishment of the Forest Fund;
3. ending with the restructuring of the enterprises and establishment of more stable organization;
4. magnify the importance of the forestry sector in the Ministry;
5. new Forest Law;
6. more defined penalty policy;
7. extension work;
8. cooperation with international institutions etc.

The main results of the workshops, as well as of the interviews, together with the comparison with the elements of forestry policy and strategy of the selected countries, were used for the development of the draft document of forestry policy in Serbia.

The Directorate of Forests has also formed a working group for forestry policy and law, which includes the representatives of the Directorate of Forests, State Enterprises and representatives of Faculty of Forestry, private forest owners and other non governmental sectors.

The plan of the proposed common draft forestry policy and forestry law includes the organization of several workshops and public debates (moderated by the representatives of the Directorate of Forests) in the regional centres. The stakeholders will be invited to the public debates by local media and by written invitations. All stakeholders will be able to present their attitudes and to propose the possible new strategic objectives and activities. This material will be available to the public on the FAO-project web site http://www.forestserbia-fao.sr.gov.yu.

As a part of Project “Institutional Development and Capacity Building for the NFP of Serbia” leaded by FAO, Directorate of Forests did made a questionnaire regarding evaluation of existing Law on Forests in the context of suggestions for a new draft Law on Forests. More than 300 questionnaires were statistically processed. The structure of polled persons regarding the institution type was as follows:
- Republic inspectorates of forestry and game (Forestry Directorate), around 100 of polled (33%);
- Public enterprises (Srbijašume, Vojvodinašume), around 190 of polled (62%);
- Faculty of Forestry, University of Belgrade, around 17 of polled (5%).

Most of the polled persons (probationers) are highly educated, substantially engineers (over 90%).

Regarding to their knowledge of forestry legislations and necessity of their change, most of them (66.8%) think that the current Law on Forests do not solve problems in forestry sector on appropriate way.
Also, most of polled believe that the changes in the area of management not-state forests (53.1% that is necessary and 31.6% that is advisably) and way of usage of subsidies and funding of forestry (60.9% that is necessary and 30.3% that is advisably) are needed. Regarding the appliance of forestry legislation most of respondents believe that it is not adapted to the needs of forestry in the new economic system (79.8%) and not correctly and persistently applied (81.8%).

Lack of this inquiry is not sufficient attendance of all education levels among the respondents, as well as number of the members of non governmental, namely non forest organization.

Further, as a part of the FAO project, one team was dealing with participation issues in order to inform local forestry experts over the current laws and possibilities to establish associates of private owners. The whole process did include investigation of three different areas with their local communities, using usual methods of gathering information’s: interview, inquiry, H-diagram, time line, Venee diagram etc.

According to the research of the participation team, current situation of private forests could be characterized with: low condition of private forests, and scattered estates; low condition of forestry roads and weak opening of the forests; high level illegal usage of forests and wood processing; low level of trust in the direction of the state authorities; low level of development and organization of current wood market; low level of knowledge regarding provisions of the Law on forests and other accompanied laws etc.

Conditions in private nurseries specialized for production of ornament species are as follows: current law did not regulate production of ornament seed material; low level of trust in the direction of state authorities; lack of programs for afforestation of abandoned agricultural and bare lands; lack of adequate reproductive ornament production material on domestic market; lack of appropriate financial means to support nursery production and as final high level of illegal production of ornament species.

Current situation among private forest and nurseries owners and problems they are dealing with are implying their strong will to establish their own association, in the light of changing the current situation in the forests/nurseries, more active state support and contacts including tuition over current legislation and connected laws etc.

Most important is that they are willing to gather themselves, and to react through the association as compact unit of people with the same goal, and in future to have possibility to directly or indirectly influence on creation or changes in the legislation which may affect their field of work.

**Public participation in Development of Environmental Legislation**

In the light of European and World trends and obvious need to expand and develop access to information and public participation, issues of public participation in development of environmental legislation were active, starting with the OSCE help, Programme “Support to Environmental Legislation and Institutional structuring in Serbia” in year 2000. The programme was made to be implemented in five layers and in five phases:

1. **Preparatory process** (with algorithm, which comprises steps taken in performing the Programme. It was, also concentrating on the fund raising and presentation of the Programme to the Donor Community as well as to the OSCE Participating States. The major break point for international organisations and foreign government engagement was to understand local environment as a broad, social issue. To gain efficient protection of our habitat and nature in whole, we must create social procedures that would enable long term development of the human society, taking into account diversity of interests and needs.);

2. **Drafting Activities** (was the essence of the programme and that was the drafting process and experts’ work);
3. **Awareness Campaign** (attention of the public was drawn to the environmental matters through various media tools and public events. It is not necessarily to mention the strong role of media in the public use for informing and mobilising the public. Used properly, media might be outstanding support to broad strategic program that was meant to engage all stakeholders into the process. Informing public, audience, stakeholders and participants on the process itself and the results of the activities taken so far, intentions and aims, in the manner that everyone could identify himself with the process, is of the utmost importance for the successful fulfilment of the goal and makes, at least, half of the success itself.);

4. **Public Consultation** (was dedicated to the public participation in drafting process through Public Consultation on the new Law. Round tables were the essential part of this phase.);

5. **Lobbying** (deal with lobbying activities. This was completely new activity in the Serbian parliament but very important. Main target of this activity was to ensure critical mass for providing better information on the matters for voting and also to contribute to the transparency of the process, and to improve quality of the decisions taken.).

One of the most important elements of the Programme was **public participation** in the drafting process. Due to the European and global standards, public most be involved in the environmental matters, since legal regulation from this area affect all of us, directly (UN/ECE, 2000).

The public participation was obtained through 31 round tables all over the Serbia, and has started in January 2002. Estimated number of direct round tables’ participants is about 3,000 Persons. However, the involved public, experts’ teams and institutions, heavily enlarged number of persons involved. All of the Local Authorities (160) were supplied with the working papers and were encouraged to comment the draft. A huge number of messages, comments and assessments have been delivered to the Directorate and expert’s group.

As a part of the OSCE Mission to Serbia and Montenegro, one of the achievements has been to assemble international and domestic support for the Serbian authorities' effort to draft new environmental legislation and establish a Ministry of Environment. The law has been finalized in 2002, along with the environmental Ministry.

Further, as the result of cooperation with the Government of Finland there is ongoing Project for the Development of Environmental Legislation in the Federal Republic of Yugoslavia (now Serbia and Montenegro), which has started in 2001. The Project shall contribute to the overall objective that Environmental legislation, compliant with relevant EU legislation.


In the scope of the project, numbers of informative, international and public workshops34 were organized from the beginning of the phase I of the mentioned project.

33 [1990] Official Journal L158
34 First International workshop on Environmental Impact Assessment and Strategic Environmental Assessment, along with International workshop on Integrated Prevention and Pollution Control – IPPC was held on December 13th 2002 in Belgrade, and were just on of the first events held in the frame of similar public activities, which were realized during implementation of the above mentioned Project. First Internal workshop held in Podgorica, February 2004.

The first Public informative workshop with trade enterprises of Vojvodina Province “Implementation of integrated environmental protection systems” (January 2003), Second public informative workshop with industrial companies of Serbia “Implementation of the integrated system of environment protection” (February 2003), Third Public Informative Workshop With Industrial Companies of Serbia “Implementation of the integrated system of environment protection” (March 2003), Public Workshop on Comments of Environmental Regulations (May 2003), First public Informative workshop Development of environmental legislation in Montenegro (October 2003), Second Public Informative Workshop with Industrial Companies...
Till now, as the result of overall activities, following draft documents, regulations and legislative instruments were enacted and are in the form of working texts dating April 2004:

- EIA law (Environmental Impact Assessment), accompanied with EIA ordinance and EIA rules;
- IPPC law (Integrated Pollution and Prevention Control), accompanied with IPPC ordinance and IPPC rules,
- SEA law (Strategic Environmental Assessment)

The execution of both the programme and the ongoing project has been very successful. Awareness on the environmental issues is considerably raised, extensive number of individuals, organizations and institutions were involved in the environmental law drafting process, local authorities are mobilized for close cooperation with the local stakeholders and the major step towards comprehensive civil society development is taken by obtaining the participation, thus responsibility, of all concerned.

In February 2004, new government was established and reorganised Ministries, so the former Ministry for Protection of Natural Resources and Environment became the Ministry of Science and Environmental Protection, with Directorate of Environmental Protection as responsible body for environmental issues in Serbia.

After more than one year of “stagnation” and stand-by situation with the “environmental system law” in National Assembly (mostly because of more than 200 amendments), it was decided that very new environmental law will not be a system law, but Law on Environmental Protection prepared by new Directorate of Environmental Protection.

Conclusions

For ensuring sustainable development of Serbia’s forest resources in the public and private sectors, it is necessary to promote participation of the different sections of society at all levels in as many aspects of forestry as is possible at each stage of progress in political and economic development towards association and eventual integration with the European Union.

The highest value of the recent and ongoing projects and programmes in development of forestry and environment legislation and institutional building lays in fact that such procedures which involves all the stakeholders (all levels of governance, members of parliament, experts, governmental and nongovernmental organizations and ordinary citizens), has not been performed in Serbia and former FRY, ever before.

They did engage number of elements for the public participation in the consultation and commenting process. With extensive side activities and media campaign, attention was drawn to the substance of the programme obtaining such strong support to the drafting process. On the other hand, decision-makers received clear message on the importance of the issue for the overall development and for Accession to EU.

It was also taken into consideration that there are limits related to the cultural or institutional, including regulative and ownership, context that may or may not be favourable to participatory approaches:

- whatever the context, public participation may be a complement to legal requirements, but cannot conflict with legal provisions, property and user rights.
- there are limits related to the issue motivating the participatory process; perceived costs of participation may restrict wide participation, while representative participation entails communication related constraints.
- some stakeholders may be unable to participate because of lack of information, of interest, of trust, or of access, or because they find other options to influence decisions

Further should be emphasized that along with enforcement of government institutions in forestry and environmental protection during the period of transition in Serbia, NGO were enforced and developed. Their work and activities, through the development of participation

of AP Vojvodina “Development of the integrated system of environment protection” (October 2003), Public Workshop on Emission Limit Values (December 2003).
approach, were significantly affirmative by the influence of private sector and local communities.

Activities of NGO also present one of elementary differences in comparison with organization of forestry and environment in the last period and also the conformation of necessity for further enforcement of non-governmental sector in these areas. Influence of NGO is especially important in Creation of Forestry and Environmental Legislations in Serbia.

At the end, all achieved for now should be placed as a model for proper, democratic and transparent legislative process and can be applied to any and all similar cases where wide public participation is needed. Thus, it is obvious that public participation represent much more than a technique, actually it is a way of acting and working. It requires a clear understanding from both organizers and participants, of what participatory approach is about and what participation opportunities are being arranged. Public participation should be based on mutual trust, improved communication and cooperation among all people involved in the process.

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Abstract

Iran has huge surface with five different forest ecosystems. It has diverse natural, economic and social conditions. All of 12 million hectares of Iran forest areas (7% of the land area) are national resources. This cover has a lot of ecological, economical, recreational, aesthetic, educational and research functions but its potential for timber production is limited. Just Caspian forest with an area of 1.9 million hectares has suitable potential for exploitation, but this ecosystem is unique and also vulnerable due to high slope, existence of rare and endangers fauna and flora species, unique forest stands and sensitive soil. Hence its protection is a must and forest legislation must provide rational use, conservation, rehabilitation, possible increases in productivity and protection. It will enhance economy, timber and other forest production, soil and water conservation, weather regulation and other benefits. Some fundamental changes occurred in the economic, social, political and environmental conditions of Iran in the recent decades and made it possible to improve forest and environment laws.

The Iranian legislation system specially its parliament has adopted several legislative acts since 1967 that some main laws adopted in 1967, 1969, 1970, 1974, 1975, 1979, 1982, 1988, 1992, 1996 and the most important, effective, complete, and near nature law adopted in 2003 that is a revolution in forest and environmental laws in Iran. The major influences on Iranian forest and environment legislation process was: convention of Stockholm in 1972, UNECE ICP forests monitoring program in Geneva in 1987, UN decree in 1987, OECD regulations and recommendations of Paris in 1990, earth summit convention of Rio de Janeiro in 1992, OSCE recommendations of Montreal in 1993, UNCSID IPF session in New York in 1995 and UN-FAO session declaration of Rome in 1995. The newest forest decree in Iran that adopted in 2003 is the main and most improved forest law in Iran in order to sustainable development. It is the plan for conservation of northern forests of the country that its stress is on forest conservation, protection and developing. It can help to make a balance between forestry and nature conservation. Its chapters including: classification of the duties in different level of northern forest management, administrative policies and measures for conserving the north forests, executive frameworks for rehabilitation and development of vegetation, optimized use of existing resources and amendment the executive and technical methods, monitoring and evaluating of management in the northern forests of Iran.

Key words: Forest Laws, Environment Laws, Legislation, Constitution, and Iran.

Introduction

Iran has huge surface with five different forest ecosystems (Hosseini, 1998). It has diverse natural, economic and social conditions. Iran characterized by various ecological conditions from tropical to alpine climate, zero to over than 5500 m elevation and various vegetation landscape from conifers to desert plants. There are significant climatic variations and differences particularly in forest regions of Iran. These conditions caused great diversity in species and various forest types in Iran (Jafari, 1997). Figure 1 shows the land classification in Iran (Hosseini, 2001).

All of 12 million hectares of Iran forest areas (7.5% of the land area) are national resources. This cover has a lot of ecological, economical, recreational, aesthetic, educational and research functions but its potential for timber production is limited. Just Caspian forest with an area of 1.9 million hectares has suitable potential for exploitation, This forest area extends throughout the south coast of Caspian Sea in northern part of Iran with 700-2000mm annual rainfall. It has high growth capacity due to humid temperate climate and fertile soil.
These forests extends for 800 km in length throughout three provinces of Mazandaran (Hosseini, 1998), Golestan and Guilan with species such as: “*Fagus orientalis*, *Quercus castaneifolia*, *Carpinus betulus*, *Zelkova carpinifolia*, *Diospyros lotus*, *Alnus subcordata*, *Tilia beogniifolia*, *Taxus baccata*, “*Buxus hyrcanus*”, “*Fraxinus excelsior*”, “*Castanea sativa*”, “*Sorbus torminalis*” and “*Acer velutinum*” (Mirbadin, 1985). Some species of Caspian forests are alive fossil such as "*Populus caspica*", "*Gleditsia caspica*", "*Parrotia persica*" and "*Pterocarya fraxinifolia*". When the Europe covered by ice, these forests were alive and at the end of frozen, plant species of Hyrcanian forests immigrated to Europe and these forests is mother of European forests. Fertile soil, suitable precipitation and temperate climate cases that "*Fagus orientalis*, "*Quercus castaneifolia*, *Alnus glutinosa* and *Aecr velotinum*" can reach 50 meter height and 3 meter diameter at breast height. The biomass in some areas of these forests can reach 2000 m$^3$ per hectare. Some species of Hyrcanian forests only related to these forests and don’t exist in other sites in all of the world. Just Caspian forest has suitable potential for exploitation, but this ecosystem is unique and also vulnerable due to high slope, existence of rare and endangers fauna and flora species, unique forest stands and sensitive soil. Hence its protection is a must and forest legislation must provide rational use, conservation, rehabilitation, possible increases in productivity and protection. It will enhance economy, timber and other forest production, soil and water conservation, weather regulation and other benefits.

**The evolution of forest legislation in Iran**

The last years have seen a rapid evolution leading to a revision of forest laws. The process of adapting legislation to new political, economic and social developments has gained considerable momentum (Schmithusen, 1999). Countries with new and amended laws range from Albania and Finland to Sweden and Ukraine, Thy include Denmark, France, Germany, Great Britain, Portugal and Spain (Schmithusen, 1999). Some major changes occurred in Iran in this period. Some fundamental changes occurred in the economic, social, political and environmental conditions of Iran in the recent decades and made it possible to improve forest and environment laws. The Iranian legislation system specially its parliament has adopted several legislative acts since 1967 that some main laws adopted in 1967, 1969, 1970, 1974, 1975, 1979, 1982, 1988, 1992, 1996 and the most important, effective, complete, and near nature law adopted in 2003 that is a revolution in forest and environmental laws in Iran.

**The major influences on Iranian forest and environment legislation process:**

The major influences on Iranian forest and environment legislation process were:
- Convention of Stockholm in 1972,
- UNECE ICP forests monitoring program in Geneva in 1987,
- UN decree in 1987, OECD regulations and recommendations of Paris in 1990,
- Earth summit convention of Rio de Janeiro in 1992,
- OSCE recommendations of Montreal in 1993,
The newest forest decree in Iran:

In 27/Aug/2003 (according to propose number 105/22511-80/4108 of IRANIAN MANAGEMENT AND PLANNING ORGANIZATION (18/Mar/2001) and based on principle 138 of IRI constitutional law), council of ministers approved integrated plan for conservation of north forests of the country as mentioned below (forest conservation, protection and developing): “Plan for conservation of north forests of the country (Forest conservation, protection and developing)”

Chapter 1: Classification of the duties in different levels of North forest management:

Article 1: Dominion of duties and total chart of different levels of North forests management (Great policy making, coordination, supervision and executing the activities) is presented below:

<table>
<thead>
<tr>
<th>Duty explanation</th>
<th>Duty domain</th>
<th>Parallel duties</th>
<th>Executer organization or department</th>
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<tbody>
<tr>
<td>0 1 2 3</td>
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<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1st level of Ruling affairs</td>
<td>Great Policy making affair and making coordination with government</td>
<td>-Proposing the procedures and great policy making for conservation, rehabilitation and developing the north forests of the country&lt;br&gt;-Making the integrated coordination between different executive organizations&lt;br&gt;-Policy making regarding to using the lands of national resources for different usages that will cause use change and decreasing the north forests area&lt;br&gt;-Approving the environmental regulations, criterions and standards of North Natural Resource Management Designs</td>
<td>-MINISTRY OF JIHAD AGRICULTURE (Forest, Rangelands and watershed organization)&lt;br&gt;- Supreme Environment Council</td>
</tr>
<tr>
<td>2nd level of ruling affairs</td>
<td>Planning affair providing, allocating and supervision (Concentrated policy making)</td>
<td>-Determining some environmental regulations, criterions and standards for North Natural Resource Management Designs&lt;br&gt;-Determining procedures and executive policies and planning the affairs in frameworks of regulation and approved environmental criterion&lt;br&gt;-Determining, providing and approving the service explanation of Natural Resource Management Design in framework of approved environmental regulation and criterion&lt;br&gt;-Representation of government about ownership rights concerning the site and the superstructure of natural forests, rangelands and groves&lt;br&gt;-Determining and receiving the ownership taxes and profits that is approved by authorities from exploiters</td>
<td>DEPARTMENT OF ENVIRONMENT&lt;br&gt;MINISTRY OF JIHAD AGRICULTURE</td>
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<td></td>
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<td>-Supervision, monitoring and evaluating the steers, policies, procedures and executive measures</td>
<td>-DEPARTMENT OF ENVIRONMENT (Environmental supervision)&lt;br&gt;-Forest, Rangeland and watershed Organization(Technical and executive supervision)&lt;br&gt;- IRANIAN MANAGEMENT AND PLANNING ORGANIZATION</td>
</tr>
</tbody>
</table>
Chapter 2: Executive policies and measures for conserving the north forests of the country:

Article 2: MINISTRY OF JIHAD AGRICULTURE (Forest, Rangeland and watershed Organization) is charged to determine all national resource area of the country. This is necessary in order to speeding the recognition and determining the area of national resource lands and separating the legal exceptions of people during 2-year urgent plan in Northern provinces of the country. Then MINISTRY OF JIHAD AGRICULTURE must receive the related license (Document) in the name of government.

IRANIAN MANAGEMENT AND PLANNING ORGANIZATION is charged to predict and determine the necessary expenditure, as annual budget for the related executive organizations. Of course this prediction and determining must be conducted after specialty evaluations.

Article 3: MINISTRY OF JIHAD AGRICULTURE is charged to submit its proposals concerning the conservation and exploitation of north forests of the country to the Cabinet in order to pass the legal process. DEPARTMENT OF ENVIRONMENT must coordinate and cooperate with MINISTRY OF JIHAD AGRICULTURE. These proposals must be delivered at most 6 months after issuing this decree. These proposals will be used in order to reform and improve the regulations and laws concerning the conservation and exploitation of north forests.

Article 4: Head of judicial can make decision concerning the protest record of protesters and illegal exploiters of forest and establishment of some specific courts.

Article 5: In order to increase the possibility of using the conservational equipments and new methods for conserving the north forests of the country, MINISTRY OF JIHAD AGRICULTURE and DEPARTMENT OF ENVIRONMENT must conduct some activities by cooperation of Ministry of Interior. These activities which will be conducted by cooperation of people include: Using the Radio communication network (wireless) in north forests, forming the protection (guard) group, protecting the main roads and establishment of protection borders. After giving the needed designs and specialty evaluations, necessary measures and budgets will be provide by IRANIAN MANAGEMENT AND PLANNING ORGANIZATION.

Article 6: Decreasing and stopping the important destructive factors of north forests in below mentioned methods are obligatory:

1- Exiting the graziers and live stocks from north forests:
MINISTRY OF JIHAD AGRICULTURE (Forest, Rangeland and watershed Organization) is charged to exit remained live stocks in the north forests (3.7 million live stocks) and about 10565 graziers (Hamlets with less than 20 families). These activities must be conducted during an arranged duration (at most 6 years). In order to achieve the mentioned goals, MINISTRY OF JIHAD AGRICULTURE must review the present executing methods and determine new suitable frameworks by exchanging the views and experiences of experts and specialists of different parts.
Governor Generals of different provinces must determine the necessary considerations in order to speed the execution of the activities, removing the obstacles and probable difficulties and necessity of cooperation and coordination between different executive organizations.

2- Gradual decrease of permitted utilization based on ecological potential of natural forests by presenting wood usage replacement plan, facility making for import the wood and other economical mechanisms concerning the situation of the markets, controlling the wood smuggle and forest roads

3- Diminishing the incompatible and destructive constructional and developmental activities of forests of the country:

A) New exploration and exploitation of mines class 1 of article 3 of Mine Law (approved in 1998), coal and decorative stones in north forests which have a destruction area more than 4 hectares must be approved by Supreme Environment Council. New exploration and exploitation of mentioned mines with destructed area less than 4 hectares must be conducted according to agreement of general department of DEPARTMENT OF ENVIRONMENT of province.

B) Allocating the necessary budget for executing the new national developmental projects that cause changing the forest use and decreasing its area, will be according to conducting the environmental studies and confirming of DEPARTMENT OF ENVIRONMENT. Executing the provincial developmental projects must be according to receiving license (permit) from General department of DEPARTMENT OF ENVIRONMENT of province.

Article 7: In order to decrease the pressure of graziers and villages around the forest on forest resources and also for replacing the graziers fossilized fuels instead of fire wood, Iran Oil National Company is charged to cooperate with MINISTRY OF JIHAD AGRICULTURE (Forest, Rangeland and watershed organization). These organizations must determine some stations for distributing the oil and gas. Also they must provide some facilities for residents of villages which have more than 20 families in order to use oil and gas with suitable cost, at most during 4 years.

Central Bank of Islamic Republic of Iran is charged to provide necessary facilities for making bakeries that use fossilized fuel, oil selling units in villages with more than 20 families in the forest border area or inside the forest. Mentioned facilities will be determined and paid with financial support to the rate of 70% from budget and technical supports plan of MINISTRY OF JIHAD AGRICULTURE.

Article 8: Regarding to potential limitation of forest resources and in order to decrease the rate of wood use and smuggle in north forests, Ministry of Commerce is charged to remove the obstacles of import of the different types (species) of wood. Ministry of Industry and Mine, MINISTRY OF JIHAD AGRICULTURE and related organizations (such as plant protection organization)

Article 9: After notifying this decree, every license for constructing the wood and cellulose industries and factories which use north forests resources, must be issued according to frameworks of the regulations of DEPARTMENT OF ENVIRONMENT and Forest, Rangelands and watershed Organizations. Mentioned organizations are charged to declare the related regulations and rules during two months.

Article 10: In order to compensate the losses of forest projects executers and mine owners who face to some loss by these decree, related executive organizations must inform the rate of loss and its type to IRANIAN MANAGEMENT AND PLANNING ORGANIZATION. Then after conducting the necessary specialty evaluations, suitable frameworks will be discussed in Economy Council in order to compensate the loss.

Article 11: The goal is to conserve the genetic sources of plant and animal species of north forest. So it is necessary to predict the necessary facilities in order to equipping, completing and developing the area that are under management of DEPARTMENT OF
ENVIRONMENT and Forest, Rangelands and Watershed Organization. This will be executed by related authorities based on the case in the Northern provinces of the country.

Chapter 3: Executive frameworks for rehabilitation and development of vegetation:

Article 12: Some parts of forest are destructed or changed to degraded forest. In order to rehabilitate the mentioned parts, MINISTRY OF JIHAD AGRICULTURE (Forest, Rangeland and Watershed Organization) is charged to recognize these areas at most 6 months after issuing the decree. Then by cooperation of people and Construction Besiege, forestation and forest rehabilitation must be executed at most during two 5-year plan.

Article 13: In order to develop the forest and wood-culture, MINISTRY OF JIHAD AGRICULTURE (Forest, Rangeland and Watershed Organization) is charged to execute encouragement policies and attract the people cooperation in order to develop and expand the forests and make the ecological balance in fertile area by doing below mentioned measures:

1) Forestation in up stream areas and areas which were forest before, but are changed and destructed now in different reasons
2) Using the results of useable researches on species which grow fast in ecological situation of different areas of the north, such as: species of Poplar, Palonia and Eucalyptus
3) Providing situations for executing the tree plantation in fertile area outside of the forest. Cooperation of nongovernmental part (especially owners of the industries) must be used in this case.
4) Executing some projects such as developing the tree planting and farm forest in fertile steep lands

Chapter 4: Optimized use of existing resources and amendment the executive and technical methods:

Article 14: Regarding to role of north forests in conserving the soil, water and biodiversity and also concerning the necessity of paying serious attention to these resources in planning the regional development, it is necessary that land use execute by priority of forest conservation and development in north forests of the country. So IRANIAN MANAGEMENT AND PLANNING ORGANIZATION is charged to cooperate with DEPARTMENT OF ENVIRONMENT and executive and research organizations. Also this organization must prepare and determine the detailed land use of northern watershed basins at most during 3 years.

Article 15: In order to qualitative and quantitative conservation of north forests and paying attention to conservation and improving the biodiversity and environmental activities, IRANIAN MANAGEMENT AND PLANNING ORGANIZATION (Technical affair and regulation and criterion determination unit) is charged to establish a committee by cooperation of representatives of below mentioned organizations. This committee must consider about reviewing the forestry projects explanation. This review must be conducted at most during 6 months after issuing this approval:

1- Forest, Rangeland and Watershed Organization
2- DEPARTMENT OF ENVIRONMENT
3- Two representatives from Natural Resource and Environment faculty of Tehran University
4- Forest and Rangeland Research Department

Article 16: In order to review and collecting the services explanation and executing the forestry projects, it is necessary to observe the principle” Natural Resources sustainable Management” based on below mentioned criterions:
1- Suitable conservation and development of conservational and protective activities of forest ecosystems
2- Suitable conservation and development of biodiversity in forest ecosystems
3- Maintenance of forest ecosystem growth and development with stress on knowledge and observing the mutual relationship of ecological factors of Habitats
4- Paying attention to Economical and Social situation of north forests and observing the “Cooperative Management and Planning” principle of graziers in executing the Forestry designs
5- Using all facilities of Forest Watershed basins by the goal of decreasing the existing permitted and non permitted utilization of north forest and providing the occupation that are compatible concerning the nature such as planning about Eco-tourism, aquaculture, wooden natural industries

Note: Continuing the existing mineral activities in the north forests of the country is no objection until the end of validity of exploitation license.

Chapter 5: Monitoring and evaluating the executive measures in the north forests of the country:

Article 17: Below mentioned cases are necessary in executing the optimizing the duties of DEPARTMENT OF ENVIRONMENT and Forest, Rangelands and Watershed Organization:

1) DEPARTMENT OF ENVIRONMENT must prepare the necessary environmental standards concerning development, rehabilitation and exploitation of natural resource and submit them to Supreme Environment Council in order to be approved.
2) Forest, Rangelands and Watershed Organization must develop, rehabilitate and exploit of natural resource according to the framework of environmental standards which are approved by Supreme Environment Council. Then submit them to legal authorities in order to be approved, and finally must execute them.
3) EIA of executive projects in order to observing the environmental standards (Part 1 of this article) is considered as responsibility of DEPARTMENT OF ENVIRONMENT.

Article 18: In order to aware the qualitative and quantitative change process of north forest and recognizing the effects of executed measures on the situation of forests and the environment, determining the future policies in order to achieve the permanent management of the forest, executing the below mentioned activities is necessary:

1) Executing the qualitative and quantitative monitoring project of north forests:
MINISTRY OF JIHAD AGRICULTURE (Forest, Rangelands and Watershed Organization) is charged to prepare big maps in scale 1:25000 for north forests of the country every 5-year. In order to draw these maps, they can use aerial photos and satellite information. Occurred changes can be presented as map and statistics of forest density. Also every 10-year, the qualitative and quantitative changes of forest can be evaluated by land statistics. These changes may include the basal area, density of canopy cover, type, regeneration situation, biodiversity and mass mixing. Also we can use sample areas or evaluating stations based on ecological considerations include biological and physical factors, then the results will be presented as comparing statistic. So evaluating and determining the social and economical situation and its changes especially statistics of population and live stock is necessary during 5 and 10-year durations, by using the evaluations of Iran Statistic Center.

2) Establishment of Forest Information Bank:
MINISTRY OF JIHAD AGRICULTURE (Forest and Rangeland Organization) is responsible for establishing some mechanized information stations for north forests of the country which include all descriptive and spatial information of present situation of the forest. Then according to mentioned temporal durations in part 1 of this article and after reviewing executive designs, can make the saved information up date. Forest, Rangeland and Watershed
Organization of the country is charged to deliver the collected data and information to the related executive organizations.

**Discussion:** The newest forest decree in Iran that adopted in 2003 is the main and most improved forest law in Iran in order to sustainable development. It is the plan for conservation of northern forests of the country that its stresses is on forest conservation, protection and developing. It can help to make a balance between forestry and nature conservation. Its chapters (including: classification of the duties in different level of northern forest management, administrative policies and measures for conserving the north forests, executive frameworks for rehabilitation and development of vegetation, optimized use of existing resources and amendment the executive and technical methods, monitoring and evaluating of management in the northern forests of Iran) covers all protectional and management needs for forest resources in Iran.

**Literature cited:**
INSTITUTIONAL PATTERNS OF FOREST SECTOR SUSTAINABLE DEVELOPMENT: INSIGHTS FROM THE ECONOMICS OF PROPERTY RIGHTS

BY LAURA BOURIAUD

Abstract

The existence of profit in harvesting a natural resource usually attracts new entrants. The classically accepted idea is that new entrants cannot come about if a single owner wholly owns the resource. Privately owned forest should mean an exclusive right of owner to decide who may access, use, withdrawal and manage resource.

Create a private based agricultural and forest economy was one of the reasons of land restitution and privatisation in Romania. Nevertheless, problems such over cuttings, timber theft, lack of forest regeneration, lack of forest investment and scale economies, etc., have early appeared in private forest lands. Political discourses commonly addressed these problems by advancing the “behaviourist” hypotheses, such little knowledge in forestry, short term economic perspective, no willingness to associate, and by “strengthening” the regulatory framework. The legality of restrictions on property rights has been confirmed several times by the Constitutional Court. Three main categories of restrictions affect the owners’ rights: restrictions on land use (owner can not freely change the use of forest land); restrictions on harvesting (volume, time, and technical norms), and restrictions on forest management (purposes, forest rotation, sylvicultural works, environmental services, etc.). Bundle of rights associated with the owner’s position is far to be exclusive, being shared between owner, public, and State (as holder of right to decide forest management rules).

The aim of the paper is to bring into attention the relationship between the regulatory policies for sustainable forest management and the structure of property rights on forests. Regulatory policies set up the legal framework and structures to implement certain looked-for forest practices. In doing so, the regulatory policies implicitly define the structure of rights on forest utilisation. The landowner’s property right became in some cases a residual right. Within the actual institutional and legislative Romanian framework, unbalanced rapport exist between private and public utilisation of forests benefits.

Here a distinction between formal defined and economic defined private rights is critical. We remind some basis of the theory of the economic property rights and we proposed a classification of forest assets in order to facilitate the understanding of property rights regimes in forests. From a formal viewpoint, the property rights are guaranteed by the Constitution and by the juridical system. However, the economic content of rights is significantly different from their legal definition (Barzel, 1997, Cole and Grossman, 2002). The analyse shows that there is a need for better specification and delineation of property rights in forests, as well as a need to involve private owners in defining the rules of forest management. Fully comprehensive property rights should allow the owner and the State to commit together in better implementation of policies for sustainable forest management.

The ownership form and the forest property rights regimes

From a formal viewpoint, the definition of property rights on forests suppose to identify the form of ownership (private or public), the landowners (holders of property rights) and the property rights regimes. The form of ownership (public or private) does not specify who the holder is. The State can own forests in public ownership and in private ownership. Communal forests also can be in public ownership, or in private ownership form. Usually the classification of ownership mixes ownership form and categories of holders. Thus, the structure of ownership (that is the share of
different ownership forms in the national forest area) is recorded by holders’ categories, as it follows:

- State forests, which understands in almost all cases the public ownership;
- communal forests, which understands the forests hold by communes, does not matter if there are in public or private ownership;
- common forest ownership, or collective forests, or forest communities, which are the forests hold by a community. They are a form of private ownership with long and interesting historical evolution, and characterised by particular rules of transferring the ownership, usually restricted to the community’ members;
- private forests, which means forests hold by individuals and forest hold by other private entities (schools, churches, associations, etc.). This category requires sometimes the distinction between “industrial” and “non-industrial” private forests, when timber industries have significant share of national forests in their own property.

The property rights regimes make reference to the legal framework of forest utilisation. The property rights regimes precise the rights and obligations hold by each category of forest users (owner, proprietor, claimant or authorised user). In the national context, the civil laws regulate the general regime of the property rights on land (heritage, transfer, alienation, lease, concession, using as collateral, etc.), while the forest law defines more properly the rights on forest assets at the operational level. The forest law establishes who may access the forest, who has to provide the environmental effects and how much can be harvested from forests.

In the French law system, common to all continental Europe, the property rights regimes can be characterised from a formal viewpoint by an embedment of three basic rights (in French, démembrements du droit de propriété): usus, fructus and ab usus. The owner has the right to use, harvest the property’ fruits (or benefits) and to alienate the land. The owner is the only one entitled to decide on the “good destiny”, that is the alienation right. The proprietor cumulates only usus and fructus. He possesses an “usufructuary” right. The authorised user possesses also the usus and fructus, but he is entitled only to a limited consummation of property’s fruits. Thus, the proprietor has the right towards all the property’s fruits, while the user can consume only the fruits necessary to himself and to his family. Ex. A forest user picking up berries for his household need is an authorised user; when he got the right to pick the berries in basis of a contract, he is an proprietor – he can then use and consume all the resource, in excluding the others; and the person who sold the right to pick up berries is the owner, he is the only person entitled to alienate a part of the property (the berries production).

Here is obvious that a source of confusion and misunderstanding of property rights come from the meaning of property, which can be in the same time the good owned (the estate, the land, the “domaine”, fr.) and the right possessed over this good.

The second source of confusion is the fact that the economic analysis of property rights, originated by English scientists (“Chicago School”) is based on the common law system, which is completely different from the French system, regular to all continental Europe. For this reasons, most of the authors consider the owner as having all three attributes of the property (usus, fructus and ab usus), while others consider that the proprietor is holding all of them (position influenced maybe from the French word “propriétaire” who designs the person having the usus, fructus and ab usus rights).

A third source of confusion is conceptual. Typically, there is confusion between the form of ownership and the property regime, e.g. between the common forest ownership, which is a form of ownership in the favour of a group of co-owners (forest communities) and open-access regimes, which is a regime of utilisation where there are no property rights for anyone. Also, there is conceptual confusion between native economic characteristics of the resource and the regime of use it, e. g. common-pool resources, which are rivalrous, but not-excludable, and common forest regimes, which is the utilisation by a group of co-owners of a rivalrous and excludable resource.
Formal definition and economic definition

The formal definition of rights on forests is different from the “economic” definition, which is studied on the “economic theory of the property rights” and on the “law and economics movement” (often called also law and economics).

The economic rights make reference to the owner’s capacity to take profit from the benefits of the asset, directly or via the exchange on the market (Barzel, 1997). When a forest owner has any control on the using of forest services, neither on the picking of non wood forest products, like berries or game, when the timber harvest is strictly regulated, and the trees are regularly subject of theft, his economics rights on forests resource are drastically diminished. Here is to remark that among countries from Central and Eastern Europe, in only one case (Lithuania), the owners have the right on game management, in other cases only the State hold it. Rights, in economic sense, are hold by the rural inhabitants, and not by the owner, when they harvest fuelwood from the forests around village, irrespective to the form of ownership or to the owner’s advice. Nevertheless, if the thing happens so, is not because mere doing signify hold a right, but because in the conditions of poor rural economy is socially accepted to do so (Cole and Gossman, 2002), some time against forest law prescriptions.

From an economic viewpoint, the system of property rights is “the set of economic and social relations defining the position of each individual with the respect to the utilisation of scarce resources” (Furubotn and Pejovich, 1972:1139). The forest management is dealing with a variety of “forest products”, which could be private or public (common) goods. In this case, a “private” or “public” forest product does not relay on the form of ownership (formal definition), but on the economic characteristics of forests assets, namely exclusivity and rivalry (defined in environmental economics, e.g. Tietenberg, 1996, Pearce and Turner, 1990).

With this respect, the private owner of the forestland has only a part of resource in property, often reduced to the right to capture timber value and the land value. In the known expression of Alchian and Demsetz, is not the resource itself, which is owned, but a bundle of rights to use a resource that is owned (Alchian and Demsetz, 1973:17). We may see in the case of forests that the property rights is a residual right, the owner owns only what the society agrees as suitable, e.g. property is the fact of convention, laws and customs, as in Kant’s and Rousseau’s philosophy of property.

Forest assets’ attributes

Each asset has several attributes, one of them private, others public (Barzel, 1997). Forest asset means the forest land, the stand at whole, or its trees, the non wood forest products belonging to the forest asset, and associated recreational and environmental services. According to their economic characteristics, the forest asset can be classified in three categories: private goods, public goods, and mixed (impure) public goods (table 1).

A second classification introduces the idea of common/club goods, which clarify the category of “mixed” attributes (table 2). In fact, according to our initial distinction between the form of ownership and the property rights regimes, we would like to suggest that Markets can be established only for private and mixed goods. Thus the rights hold on attributes from the category R (real property), W (wood products) and part of B category (non wood forest products and forest related activities) can be exchanged on the market, enforced inter partes or through State action.

The structure of rights according to the forest attributes can be described as follow:

**Categories R and W.** The formal entitlement belongs to the land and stand in the majority of cases. From a formal viewpoint, there are real rights. The entitlement can be also belonging only to the standing timber or other forest products (e.g. mushrooms), when a private right is granted to forest contractors. In this case, the right is a personal right, not a real right.
In principle, the private ownership on forest contains formally all rights related to the use of forest goods from R and W category. Nevertheless, several restrictions on using timber from his own property exist: the State can establish a quota in a top-down manner; the marking of trees can be compulsory; the timber has to be harvested only according to the forest management plan provision; the timber is harvested without consideration of market incentives, etc. If we consider also the theft, the owner’s right on timber is far for being exclusive. Restrictions affect also the exchange of property on land market (pre-emption right), or the transmission of properties by heritage.

Table 1. Public and private goods in forests

<table>
<thead>
<tr>
<th>Category of forest asset</th>
<th>Products, services and activities in forests (forests attributes)</th>
<th>Exclusivity</th>
<th>Rivalry (substractability)</th>
<th>Character of the attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>R : Real property</td>
<td>Forestland</td>
<td>strong</td>
<td>strong</td>
<td>private</td>
</tr>
<tr>
<td></td>
<td>Timber for market</td>
<td>strong</td>
<td>strong</td>
<td>private</td>
</tr>
<tr>
<td></td>
<td>Timber for self-consumption</td>
<td>strong</td>
<td>strong</td>
<td>private</td>
</tr>
<tr>
<td>W : Wood</td>
<td>Firewood</td>
<td>moderate</td>
<td>strong</td>
<td>mixed</td>
</tr>
<tr>
<td>B :Forest products and activities</td>
<td>Wild berries</td>
<td>moderate</td>
<td>strong</td>
<td>mixed</td>
</tr>
<tr>
<td></td>
<td>Mushrooms</td>
<td>moderate</td>
<td>strong</td>
<td>mixed</td>
</tr>
<tr>
<td></td>
<td>Medicinal herbs</td>
<td>moderate</td>
<td>strong</td>
<td>mixed</td>
</tr>
<tr>
<td></td>
<td>Grazing activities</td>
<td>moderate</td>
<td>strong</td>
<td>mixed</td>
</tr>
<tr>
<td></td>
<td>Hunting</td>
<td>moderate</td>
<td>moderate/weak</td>
<td>mixed/public</td>
</tr>
<tr>
<td></td>
<td>Recreation</td>
<td>moderate</td>
<td>moderate/weak</td>
<td>mixed/public</td>
</tr>
<tr>
<td>E :Environmental and social services</td>
<td>Tourism</td>
<td>weak</td>
<td>weak</td>
<td>public</td>
</tr>
<tr>
<td></td>
<td>Carbon storage</td>
<td>weak</td>
<td>weak</td>
<td>public</td>
</tr>
<tr>
<td></td>
<td>Soil protection</td>
<td>weak</td>
<td>weak</td>
<td>public</td>
</tr>
<tr>
<td></td>
<td>Biodiversity</td>
<td>weak</td>
<td>weak</td>
<td>public</td>
</tr>
<tr>
<td></td>
<td>Climatic effect</td>
<td>weak</td>
<td>weak</td>
<td>public</td>
</tr>
<tr>
<td></td>
<td>Watershed protection</td>
<td>weak</td>
<td>weak</td>
<td>public</td>
</tr>
</tbody>
</table>

Category B. Open access is provided for the large public, who can go into the forests and pick up forest products. The condition generally required is that the grabbing of forest fruits and mushrooms should be done for the personal consumption, and not for the commercial purposes, case when the owner is entitled to ask a payment. Otherwise, the owner may ask a payment if he carried out measures in order to increase the productivity of forest in this category of forest products (Estonian law). Only in the Polish forest legislation the owner can refuse the access of large public to collect non wood forest products, while Romanian public administration understands to fix itself the rules of harvesting non wood forest products from the public forests. Also in Latvia forest, the use of forest is regulating by the forest manager. Nevertheless, the law does not specify if the owner has an exclusive right to the forest products, possible to transfer in change of a payment, or if he has only the right to limit up to a certain level the freely harvest of forest products. In the first case, he would have a private property rights because it is possible to alienate; in the second case, he would have only a management right.

Picking of forest products calls for a distinction between “productive” activities and “recreational” activities. When grabbing of non wood forest products is made for self-consumption, for commercial purposes, or for substituting other foods products, this activity has similar regime than the assets from category W. When grabbing of forest products is practiced as recreational activity, consumption is less exclusive than in the first case. Except the exclusive rights created in the favour of owner (legislation of Poland) or other user allowed
to harvest some secondary forest products according to a forest permit (most legislations from Communities of Independent States - CIS), the “forest services” from B category are quasi-collective or even collective goods.

**Category E.** The landscape, soil protection, water regulation, climate regulation, wildlife protection, etc. are rarely granted to someone through a property rule and remain then in the public domain. An exception is provided by the recent contract concluded between the Romanian national forest administration and the World Bank, on selling the value of carbon sequestration on national forests. A tone of carbon stocked in forests was priced at 3.6 USA dollars (Universul Pădurii, 2003). The contract consecrates a formal property right of Romanian National forest Administration on the forest service represented by the carbon sequestration.

When attributes from E category belong to private forest property, the owner has the obligation to maintain them at a certain level. The obligation is of different degrees. The Estonian law gives recommendations to owners to manage them forest into respect of environmental effects. For the protection of the key biotopes, the State can conclude a contract with the landowner. The Polish and Romanian laws oblige the forest owners to carry out measures in order to maintain the level of environmental effects. The law proposes free help and financial support with this respect. In Slovenia, the State support up to 80% the costs of sylvicultural operations if the protected/protection forest is concerned. In almost all countries, the forest owner has the right to receive compensation if the special measures took for providing environmental effects have a negative income impact (Bouriaud, 2002).

**The rights on forest utilisation**

The rights to use resource could be analysed as composed by operational-level property rights (access and withdrawal) and collective-choice level property rights (management, exclusion and alienation). The collective-choices determine which the operational rules of forest management are and who may participate in changing the operational rules (Schlanger and Ostrom, 1992:250). Next table (table 2) shows the classification of rights holders according to the well known analytical model proposed by Schlanger and Ostrom (1992:252).

<table>
<thead>
<tr>
<th>Access</th>
<th>Proprietor</th>
<th>Claimant</th>
<th>Authorised user</th>
<th>Unauthorised user</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusion</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alienation</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Concerning the operational-level rights, it depend to which category belong the asset. Landowner’ rights on real property (category R) comprise all operational-level and collective-choice level rights. The landowner can regulate the access on property. Even when public access is granted for everyone, the forest owners still can determine the conditions of this right. He has the withdrawal, that means the exclusive property benefit (e.g. rent). He can alienate the forestland, or use it as collateral.

The bundle of rights that the forest owner holds is significantly restricted when going to category W. The forest owners still have the access and can regulate the access to the timber products. By law, he is protected against timber theft, so his rights on timber products would be exclusive – with few exceptions. He can “capture” the benefit stream of producing timber, but he is rarely allowed to decide conditions on exploiting the resource, neither to improve it. Ex. The rules of harvesting timber in countries from Central and Eastern Europe are set up and adopted in a process which the forest owners were not able to attend, at least until recent
period. The blame is on the political system failure to include participatory schemes of forest policy formulation, on lack of forest owners’ representation in early decisions which defined the paths on private forest management, and so on. With this respect, their position is poor on collective-choice level rights. The alienation rights they still have differentiated them from proprietors or claimants’ position. Once timber is cut according to the established rules, they have the right to sell it, or burn it as well. That means that, from an economic viewpoint, the owner shares his “management” rights with the State, if there are not completely delineated to the State.

Particular point appears about the use of forests by the rural communities. In CEE countries, but especially in low forested areas from CIS, the rural communities relay for firewood procurement on forests around village, irrespective to the form of ownership. They utilise resources than no other group are interesting in using, namely they grab dead wood, small pieces not interesting for industrial purposes, etc. Their position in Romania is that of an authorised user. The law does not specify about their rights to pick up dead wood or branches, but it is a socially acknowledged custom. A firewood harvester has an access right and the right of withdrawal, but he can not change the collective-choice rights (management rights), e.g. he can not devise the withdrawal of firewood. In other situations (Armenia, Kyrgyzstan, Georgia), the villages can have also the management rights, which put them in the position of claimant or proprietor. The rural communities can be also in position of authorised user or claimant regarding other forest related activities: grazing, haymaking, beekeeping, etc. The same rationality can be followed for other forest products and services (category B and E), for which the alienation rights is more often restricted. The conclusion is that the forest owners rarely can participate in the definition of forest utilisation, which is formulated collectively in political driven decision-making processes. The owners have the operational rights over resource, but they can not always participate in defining the rights they have.

**Conclusion**

1. Bundle of rights depends upon position, and position depends on the asset considered. Nevertheless, the economic analysis based on the attributes of forest assets (R, W, B and E categories) has any relevance if not consider the basic support provided by the legal ownership form. That is the reason why comparative approaches of different regulations on forest ownership should consider two questions:

   - who owns the “principal” good – that is the forestland (category R), and
   - who owns the rights to manage the attributes of forests (categories W, B and E).

The management of a resource supposes that the owner has the possibility to regulate internal use patterns and transform the resource by making improvements: “individuals who have right of management have the authority to determine how, when, and where harvesting from a resource may occur, and whether and how the structure of the resource may be changed “ (Schlager and Ostrom, 1992: 251). The right to manage the resource does not include the right to destroy the resource, e.g. deforest the area, strictly regulated in forest legislations.

Considering one question without the other means an incomplete and senseless explanation of the economics of property rights structure in forests.

2. There is a need of more comprehensiveness of property regimes. Fully comprehensive property rights to a forest “enables the holder to maximise the value generated by all its attributes and possible uses, compromising one in favour of another whenever it is advantageous to do so” (Gluck, 2002:128). By rights allocation, the State could « delineate full property rights to the asset » or it can restrict the rights of forest owners in order to « to enhance the separation of the individual economic rights » (Barzel, 1997).

In order to clarify the property rights regimes on forests, the public action can

   - relay on regulation, as the case is now: the forest law establishes who has to provide forest services, which are the rules of forest utilisation, etc.;
- relay on market: better delineate (specify) the property rights to the landowners, e.g. allocate rights on production of non wood goods, create markets for forest services. More specific rights means represent “a removal of the resource from the public domain into the hands of specific rights owner” (Bromley, 2000:369). Ex: the carbon sequestration potential can be “captured” from the public domain (Rosenbaum, 2001).

3. The distinction between legal rights and economic rights, with the emphasis on collective-choices rights of management should contribute to a better understanding of property rights on forests. Critical for public action is the reference to forests as a bundle of rights held by the owner, or as a common-pool resource. Over centuries, the State has made efforts to clarify ownership and to support exclusive owner’ or State’s rights on forest benefits (Bouriaud, 1997). Nowadays, we witness the reversed situation, where non holders of forestlands price the forests as much as legal holders do so. The challenge of the property rights debate is to clarify the owners’ position in a world considering forests more and more as a common pool resource.

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References
COMPARATIVE ANALYSIS OF THE STRUCTURE OF STATE FOREST MANAGEMENT IN THE NUMBER OF EUROPEAN COUNTRIES AND PROSPECTS IN REFORMATION OF FOREST MANAGEMENT IN UKRAINE

BY LYUBOV POLYAKOVA AND MIKHAYLO POPKOV

An attempt is made in this work to analyze a structure of the state forest management in the number of European countries. Such analysis allows a better comprehension of the experience and trends in the reformation process and a choice of the model that is most suitable for the development of the country.

Russia. All forests until present are in the federal property. The structure of forest management has been reformed several times for the last 12 years. The Ministry of Forestry functioned until 1992. In 1992 it was transformed into the Forest Committee within the Ministry of Nature. Later this Committee was separated from the structure of the ministry and transformed into a Federal Service of Forestry of Russia (Rosleskhoz). In spring 2000 the Federal Service was closed down and its functions were transferred to the Ministry of Natural Resources. The State Forest Service was formed in the Ministry in 2002. In April this year this Service was transformed into the Federal Agency of Forestry by the decision of the Government of the Russian Federation. The government determined the number of staff and territorial bodies of the Agency, however their formation will be completed only in June.

Institutional Structure (current and projected)

The state forest enterprises are not authorized to harvest wood and to process it according to the Forest Code. Forest use is implemented on the basis of a long-term rent or concession of the Forest Fund. De jure the concession model of forest management is being implemented in Russia at present. However, it does not fit to densely populated regions with relatively little forest. Differentiation of approaches to organization of forestry in different regions on the
country is under discussion. In the regions with large forest areas the concession model is proposed while for the regions with little forest the work should be done by the state forest enterprises.

**Turkey.** It is a forest-deficit country suffering from soil erosion and paying much attention to forestation. Practically, 100% of forests are under state ownership. All functions of the state in relation to forestry, such as legislative-normative, control-administrative, economical and support functions are concentrated in one administrative body – the Ministry of Environment and Forestry (until 2003 the Ministry of Forestry). Significance of the forest sector for the economy of the country is illustrated by the fact that the former Minister of Forestry has become the Minister of Environmental Protection. Unfortunately, I failed to find out whether the structure of the state management of the forest sector changed if any changes happened, so I will present the data on the structure of the forest sector that existed before the merge of the ministries. There were 4 General Directorates functioning within the ministry and having two parallel structures at the regional level. One structure was subordinate to the General Directorate for Forestry and was involved directly into forest management, the other one was performing the functions of the rest three General Directorates responsible for national parks, hunting, forestation, erosion control and rural development. Each General Directorate was financed from a special fund created under corresponding Directorate. The main sources of funds came from the state budget and targeted deductions from the wood sales proceeds.

**Institutional Structure of the State Forest Sector in Turkey (2001)**

**Poland.** Practically 80% of forests belong to the state. All basic functions including control are transferred to the State Holding Lesy Panstwowe. The legislative-normative functions are carried out by the Forest Department of the Ministry of Environment with close collaboration with the experts of the Holding. There are 17 Regional Directorates working at the regional level. They are responsible for forest enterprises and for entities providing technical support. Besides, five forest enterprises are directly subordinate to the Holding.
The Czech Republic. A share of state-owned forests in Czech Republic is a little bit more than 60%. State management functions are separated. Forest department of the Ministry of Agriculture with its regional and district representatives performs legislative and normative function. Most of the state forests are managed by the state company Forests of the Czech Republic responsible for more than 1.4 million ha of forests. Aside from forest territories the company also manages 20 thou km of water resources. At the regional level the Company is represented by regional inspectorates whose functions are reduced to methodical and control activities as well as information and legal support of forest entities. At the local level the Company has two types of forest entities – forest enterprises and forest districts. Forest enterprises carry out all forest operations independently, which allows the Forest Company producing a representative estimation and appropriateness of these operations. In contrast to forest enterprises all forest operations in the forest districts are carried out by the private companies on the contracts. Operational planning and verification of the quality of forest operations are their main activities.
Hungary. A share of the state forest in Hungary is 60%. State management functions are separated. The Forest Department at the Ministry of Agriculture and Rural Development carries out legislative and normative function. The control function is vested with the State Forest Service, which is legally independent entity and is subordinate to the Ministry. It has 10 regional directorates and aside from control function is responsible for forest management planning. The regional structure of the Forest Service is not linked to the administrative division of the country. The Ministry of Environment within its competence also controls the state of forests and has the right to impose certain restrictions on forest management. There are no other bodies with forest management control functions in Hungary. The Ministry of Finance acts as the owner of state forests. It has a contract with the Hungarian Privatization State Holding subordinate to the Ministry of Privatization. The Holding owns not only forests but also other assets (for example, the Air Company Malev). There is no single structure responsible for forest operations in the state forests. The Holding concluded contracts for forest management with 22 forest joint stock companies with 100% of the state capital (three of them are subordinate to the Ministry of Defense). The role of the Holding is to prescribe rules (activities), to coordinate annual common plans and to approve the balance sheet. It is typical for Hungarian forest companies to have wood processing facilities (part of the companies keeps wood processing facilities and part of the companies are share holders in the separated wood processing facilities).

Institutional Structure of the State Forest Sector in Hungary (2002)

Lithuania. A share of state forests in Lithuania is 50%, however shares of private and state forests vary from 70 to 26% depending on the region. As in other Baltic countries, the market of forest land plots is actively functioning in the country. The reform of the institutional structure was completed quite recently. Four divisions of the forest department of the Ministry of Environment perform the legislative-normative function. The control function is vested to the Forest Control Division of the State Environmental Protection Inspectorate functioning under the Ministry. The state forest company with its 42 forest enterprises manages the state forests. However, in contrast to other countries, the role of the Lithuanian company is reduced to coordination of economical activities, organization of the national system of forest protection against fires, pest and disease control and introduction of new technologies. The
State Protected Areas Service under the MoE is responsible for management of the nature protection areas (national regional parks, State Strict Nature Reserves). The Lithuanian forest institutional structure is characterized by a considerable number of organizations rendering support to the activities of the forest sector organizations.

**Latvia.** A share of state forest in Latvia is almost 50%. The institutional structure was reformed earlier in the year 2000. All functions in the forestry sector are clearly separated. The normative function is vested with 2 forest departments of the Ministry of Agriculture, control function is carried out by the State Forest Service with its 26 territorial entities (the number of territorial entities correspond to the administrative division of the country). Aside from control for observation of the forest law the State Forest Service is responsible for monitoring, maintenance of the databank, forest fire control, research activities. The State Joint Stock Company with its 8 regional divisions is responsible for forest operations. The activity of the Company is centered around 4 directions: managing forests, production of seedlings and seeds, production and sale of round wood as well as hunting and rendering of recreation services, which have been isolated into a separate activity last year. Activities as well as profitability grow every year.

**Institutional Structure of the State Forest Sector in Latvia (2004)**
Slovakia. A share of state property in Slovakia is 42.7%. The Forest Department of the Ministry of Agriculture carries out normative and control functions. However, at the regional level the tasks of forest administration is vested with forest departments at the regional bodies of executive power, which creates certain difficulties and confuses to the system of forest management. The State Forest Company responsible for forest management in the main part of the state forest has been functioning since 1999. Aside from state-owned forests the Company manages the forest lands that have not been yet transferred to the owners as well as some private lands under rent. The Company has 26 forest enterprises and two firms involved into provision of reproductive materials and technical support to the forest divisions.

Estonia. A share of forest lands returned to former owners is the largest in Estonia as compared to other Baltic countries. The state owns only 37% of forests. The Forest Department of the Ministry of Environment is responsible for normative function. At the regional level 15 county Environmental Departments being the departments of the Ministry control the state of the forests, issue permits, organize works for protection of forest ecosystems and consult private forest owners. The State Agency RMK manages all state forests on a commission of the line ministry. Aside from more than one million hectares of forest land the Company manages queries for extracting mineral resources, forest nurseries, hunting areas (state hunting counties cover only one tenth of the county hunting areas), recreation zones and resorts, consulting center, nature protection school, forest museum. The Agency pays special attention to recreation activities and nature protection education of the population.
Austria. The state forests in Austria account for almost 20%. 3.88 million ha of forest lands are managed by 214 thou of forest owners, 48% of forest holdings being 200 ha and smaller. Austria presents an example of forest sector management under conditions of Federation. The normative function at the federal level was vested with the Federal Ministry of Agriculture, Forestry, Environment and Water Management. There is no organization responsible for the forest sector at the level of lands (administrative division units in Austria), so the Governor of lands/counties and his administration is responsible for forest sector performing the control function. At every administration there is forest inspection/engineer’s department making all decisions on forest management activities. Besides, every administration has legal experts responsible for final decision. In line with the Forest Code the decisions made at this level concern forest identification, land clearing and restriction on use. After institutional reform of the forest sector since 1997 the State Joint Stock Company with 97% of the state capital has become responsible for forest management in the state forests. At the regional level the Company has 12 forest enterprises with 121 divisions at the local level, 2 enterprises at the national parks, 5 profit centers responsible for wood harvest, construction of forest roads, logistics of forest operations and consulting services. The Headquarters of the Company has 6 departments. It is worth noting that the organizational structure of company is decentralized. At the same time development of information technologies, work with real estate and environmental protection services are concentrated at the central level.
**Institutional Structure of the State Forest Sector in Austria**

- **Federal Ministry of Agriculture, Forestry, Environment and Water Management**
  - **Departments**
    - Forest Policy and Information
    - Forest Training and Further Training/Research
    - Forest Resources, Budget Affairs
    - Forest Area Planning/Forest Protection
    - Torrent and Avalanche Control
  - **Central Authority**
    - Provincial Governor (9 Lands)
    - Provincial Forest Inspection Service
      - Official forest engineering experts
    - District Administrative Authority
      - District Forest Inspection Service
      - Official forest engineering experts
  - **Federal Austrian Forests**
    - (Österreische Bundesforste AG)
      - State company (15%)
    - Provincial and municipal forest enterprises
    - Private forests > 200 ha
      - 22%
    - Private forests < 200 ha
      - 49%
    - Provincial and municipal
      - 4%
    - Community forests
      - 9%
    - State company and other public
      - 16%

**Institutional Structure of the State Forest Sector in Sweden (2004)**

- **Ministry of Industry**
  - National Board of Forestry
    - 10 regional units
      - 77 local units
    - Fortification verket
      - Military unit
      - 107 mio ha
    - SCA
      - 2 mio ha
    - Stora Enso
      - 1,5 mio ha
    - Ownership of other private and public
      - companies
    - 3.5 thou. private forest holdings
      - Average size of holding 83 ha
    - Swedish Institute
      - Support
    - Sveaskog AB
      - State company
      - 4,6 mio ha
    - Fortification verket
      - Military unit
      - 107 mio ha
    - SCA
      - 2 mio ha
    - Stora Enso
      - 1,5 mio ha
    - Ownership of other private and public
      - companies
    - 3.5 thou. private forest holdings
      - Average size of holding 83 ha

**Sweden**. A share of state forest ownership in Sweden is the smallest in comparison with the above countries and comprises 18%. The National Board of Forestry acting within the Ministry of Industry is responsible for normative and control functions as well as function of support. The State Joint Stock Company is responsible for forest management in the state forests. The history of the current Forest Company Sveaskog is very dramatic and instructive. In 1993 the State Forest Company was enlarged by the state wood processing facilities and transformed into the Joint Stock Company AssiDomän that offered the shares at the stock market. At that time the state held the control package of shares. When new politicians came to power the policy of the state towards forests has changed. In 1998 a decision on the necessity to return the state property was made. The state bought out 900 thousand ha of forest lands losing the control package of the shares of AssiDomän, which became at that time one of the largest forest processing companies owning forests and having processing facilities in many European countries. In October 2001 all shares were bought out with large losses for the state. The Company was transformed receiving under its management all other state forests, however this time the shares of the Company are not sold at the stock market. At present the administration of the company wants to sell out the remaining processing facilities and concentrate its efforts on silvicultural operations.

**Structure of forest by ownership**

- **Private** 51%
- **State** 18%
- **Other public** 25%
- **Forest products comp.** 25%

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Note: The diagram and text provide an overview of the institutional structures and forest ownership in Austria and Sweden, highlighting key entities and their roles in managing and utilizing forest resources.
Despite seeming versatility of the management system one can distinguish three models of management of the state forest as suggested by the World Bank:

- **Complex model.** In this case the state forest enterprise carries out the functions of administrative and control body in relation to all forests as well as the function of the owner for the state forests. Historically this type of forest management is the “oldest”. Initially it was typical almost for all European countries. At present it is differently modernized. The classical complex forest management model is preserved in the number of highly developed, socially and ecologically stable European countries, such as Germany, Belgium, Denmark. Departmental variant of the complex model is typical for post-socialist countries where the Soviet power lasted for more than 70 years. Practically, 100% of forests in these countries are owned by the state. The current forest authorities perform legislative and supervision functions managing at the same time the forest enterprises involved into silvicultural activities in the main part of the state forest. Part of the forests is managed by the state authorities where the forest management is not the main activity, for example, the Ministry of Environmental Protection, the Ministry of Defense). The comprehensive-economical model is typical for Poland where the majority of forests are managed by the State Holding performing not only economical but also other state functions.

- **Separation model.** This type of model has widely spread for the last 10-15 years and now is the main model for the EU. It is ideal for the countries with large areas of private forests. A typical feature of the separation model lies in the fact that legislative and control functions are performed by the state authorities not at all involved into economical activities. State enterprises operating in the same environment as private entities. Separation type of the forest management is implemented in Austria, Great Britain, Finland, France and in all post-socialist countries which after the Second World War joint the socialist camp and in the early 1990s performed restitution of the land property. Irrespective of the general character of the management system this model has the following variations:
  - state functions may be shared between two (Czech Republic, Poland, Sweden) or three structures (Lithuania, Latvia, Austria, Estonia, Hungary).
  - control function may be performed by an independent specialized forest authority (State Forest Service in Latvia and Hungary), forest departments of a relevant ministry (Czech Republic, Sweden), services of environmental protection (Estonia, Lithuania) or vested with the local executive power (Slovakia, Austria).
  - Silvicultural operations in the state forests are usually performed by one entity with the hierarchic structure with exception of Hungary that has 22 legally independent forest companies.
  - State enterprises may act as state companies (Czech Republic, Lithuania), joint stock company (Sweden, Latvia, Austria), agencies (Estonia).
  - Management style of the state forest companies also differs. Forest management may be strictly centralized (Latvia, Czech Republic, Sweden, Estonia) or decentralized (Austria, Lithuania, Hungary) when the administration of the company plays a coordinating role while at the central level only few functions are concentrated.
  - In most cases companies are responsible for the whole cycle of forest operations from planting till logging and wood sale but they are not involved into wood processing. Hungary is an exception because some of state forest companies have wood processing facilities
  - Protection forest territories are managed by other structures subordinate, as a rule, to the ministry of environmental protection directly or through a special authority (State Protected Areas Service in Lithuania).
The last model is the model of **transferring the powers.** In this case the forests are transferred to the concession or privatized. The state in this case performs the functions of regulation and control while the rights for production and marketing activities are transferred to private entities in the basis of the rent or concession agreements. This model is typical for the countries with a high level of forest cover where considerable forest areas are not included into economical cycle. This model is also implemented in Canada and Russia. Variant of the model differs in the volume of authorities, term of concluding contracts and settlement procedures.

### Models of management of the state forest

<table>
<thead>
<tr>
<th>Model</th>
<th>Comprehensive</th>
<th>Separated</th>
<th>Transfer of authorities</th>
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<tbody>
<tr>
<td></td>
<td>State enterprise performs the functions of administrative and control body (for all forests) and the functions of the owner (for state forests)</td>
<td>The state performs the control functions. A separate state authority or company is responsible for economical functions. This company is owned by the state but functions as a private unit.</td>
<td>The state performs only control and regulatory functions while the functions of economical and marketing management are transferred to the private structures on the rent of concession basis.</td>
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<tr>
<th>Prerequisites</th>
<th>High social and economical significance of forests</th>
<th>Rather high forest coverage, as a rule</th>
<th>High forest coverage</th>
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<tbody>
<tr>
<td></td>
<td>Shortage of forests</td>
<td>Relative parity of state and private forests</td>
<td>Considerable part of forests are not included into economical cycle</td>
</tr>
<tr>
<td></td>
<td>Considerable part of state forests</td>
<td></td>
<td>Developing countries, mainly producers of resources</td>
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<td></td>
<td>Socialism</td>
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| Countries | Turkey, Denmark, Germany, Belgium, Ukraine, Belarus, Armenia, Georgia | Poland, France, Austria, Estonia, Latvia, Lithuania, United Kingdom, Hungary, Czech Republic, Slovakia, Sweden, Finland | Liberia, Cameroon, Gabon, Congo, Malaysia, Papua New Guinea, Indonesia, Canada, Russia |

### Prospects in Reformation of Forest management in Ukraine

Until present Ukraine has preserved the departmental model of the state forest management. The SCF performs legislative-normative and control functions as well as manages the state forest enterprises responsible for silvicultural activities on the areas in 6.7 million ha (67%). The Ministry of Agrarian Policy is also responsible for considerable part of forests left after restructuring of kolkhozes and state farms. Disadvantages of the departmental system of the state forest management are typical and well known. All stakeholders of the forest sector have realized the necessity of its reformation. However, there is not unanimity in the views concerning the ways of the reformation.

Main proposals are reduced to the following:
- To choose the rent-concession model;
- To create the State Holding on the basis of the SCF similar to Polish variant;
- To carry out superficial reformation reduced to strengthening of the administration role of the state (transformation of the oblast Production Association into the forest departments).

It is recognized that production functions should be separated from control functions. A number of administrative and legal steps have been made this year towards the reform. In particular:
- two presidential decrees and a number of decrees of the Cabinet of Ministers concerning reformation of the forest sector were adopted;
• the Ministry of Environmental Protection was divided into two organizations in February this year;
• the forest inspection is in the process of organization in the Ministry of Environmental Protection;
• two draft forest codes are submitted to the parliament for consideration, they are essentially different;

Now it is difficult to predict the development of the events. The Forest Management Scientific Center advocates the Polish variant of the reform. Complexity in implementation of this reform is related to extreme heterogeneity of Ukraine. It is impossible to create the state forest company that would be economically self-sufficient in the steppe areas with low forest coverage. Forestry in these oblasts should be subsidized from the state budget. In this case it is possible to create 2 or more economical entities with different financing schemes.
ENVIRONMENTAL LAW DEVELOPMENTS IN SUPPORT OF SUSTAINABLE FOREST MANAGEMENT

BY LAURA BOURIAUD AND GHEORGHE DURAC

Summary

The main challenge that the environmental legislation faced the latest years was the implementation of “aquis communautaire”. The negotiations for chapter 22 “environmental protection” started in 2002 and are continuing. The Environmental Law (Law n. 137/1995) has been modified in June 2003 to include European Directives. During the first four months of the year 2004 a number of 12 laws and regulations EU-accession relevant have been adopted in the field of environmental protection. According to the government, 86% of the EU legislation on environmental protection is already adopted in the national legislation.

Among new developed regulations, few are directly forest-related, such the Governmental ordinance on forest reproductive material n. 11/2004. Nevertheless, important steps for the law implementation have been done in the institutional structures in 2004 in both environmental protection and forestry sectors.

The paper analyses how the recent environmental law would support the sustainable forest management. The relationship between environment and forest law is from general to special: the special law (forest in this case) is of immediate implementation, and the forest regime is the main instrument used to implement sustainable forest management. Although good premises exist within the forest law and regulations to be environmentally-friendly, lack of inter-sectorial cooperation, participation and communication hampers the perception of forestry as promoting ecological values.

Recent law development in forestry and environmental protection

The main challenge that the environmental legislation faced the latest years was the implementation of “aquis communautaire”. The negotiations for chapter “environmental protection” have been opened in Brussels by the Intergovernmental Commission for accession to EU in 21 March 2002. The modification of the Environmental Law from 1995 has been triggered by several reasons:

- the modification of annex 1 of the previous law (Law n. 137/1995) was necessary to include the terms and definitions used by the EU legislation;
- the law has been modify to include compulsory environmental impact assessment for projects according to the Directive 85/337/EC, modified by Directive 97/11/EC and for plans and programmes, according to the Directive 2001/42/EC;
- to enforce cross-sectoral cooperation, the law introduces the principle of integrated prevention and control of pollution, as basic principle of authorising industrial activities;
- the need was to clarify the general public’ right to access environmental-related information.

The law clarifies also the functioning of the Environmental Found. While under the former law, the sylviculture was not subject to EIA, now the plans and programmes in the sylviculture area have to contain an EIA. The newly adopted law creates premises for a holistic approach of environmental protection within the other sector-based policies, e.g. when it states that all local and central authorities are obliged to include in their budgets funds for programmes for environmental protection. A policy of inter-sectorial cooperation has been started already in 1998, when an inter-ministerial commission has been created. The regulation of inter-ministerial cooperation has been modified in 2001 (Governmental regulation 1097/25.10.2001), when a Committee has been created aiming to coordinate the integration of environmental protection in the national and
sector-based strategies. The role of the Committee is critical in promoting and monitoring the implementation of National Plan for Acting for Environmental Protection. A National Council of Environment and Sustainable Development exist since 2000.

It is worthwhile to mention here that the environmental law has been developed under changing institutional context. The Ministry of Environmental protection, which functioned independently since 1990, has been included in the middle of 2003 to the Ministry of Agriculture, Food and Forests, and became again a separate ministry in March 2004. Two new governmental regulations came to organise the National and, respectively, the Regional Agencies for Environmental Protection (Governmental decisions 1625/2003 and 1626/2003). The Environmental guard, with law enforcement attributions, has been created in December 2001, became operational in March 2002, and has been transferred in 2003 to the National Authority for Control.

The forest sector faced institutional changes too, by the merging/splitting of Ministries of agriculture and of environmental protection, but especially by the modifications of the enforcement structures. The Inspectorates for Forest Regime and Hunting which started to be effective in 2001 have been included in the National Authority for Control within the Environmental Guard. Part of staff from the Inspectorates moved again in April 2004 out of Environmental Guard in order to establish the territorial directions for forest regimes, as territorial bodies of the Ministry of Agriculture, Forests and Rural Development. A figure with the institutional framework is provided in the Annex 1 of this paper.

A new law come in the forest sector in April 2004 to regulate the forest regime. The law addressed the issue of administration of private forests and tries to enforce some rules already existing in the Forest Code (e.g. the rule of compulsory regeneration of forests after the cutting).

Few forest acts have been established to implement the EU legislation, e.g. the Governmental ordinance on forest reproductive material n. 11/2004, the fight against the forest fires (Ministerial Order nr.651/23.12.2002 on the classification of the risk level of forest fires), the measuring, classification and marking of rough wood (Governmental Decision 1090/9.11.2000). The private forest management has been addressed by a Ministerial Order (n. 116/2002) which opened the way of creating private structures for managing the private forest estate.

Three main factors underlined the recent law development pointed out above:
- the factor of EU accession. The important institutional and legislative changes have been triggered by the need to transpose EU acts in the national legislation. As indicate in the rationale of the law, the legislator’ intention was to provide a law which can easily integrate further new EU acts in environmental protection;
- the need to separate the regulatory functions from the control functions, which is a common trend for forest legislation and environmental legislation, and which leaded frequently to institutional change in the last two years;
- the need of the decentralised public services and the introduction of territorality principle in both forest management and environmental protection.

Hitherto legislative and institutional effort seems to be deployed in environmental law in order to get inter-sectorial coordination of environmental protection. The question rises in which extent the inter-sectorial cooperation is characterising also the relationship between the forest sector and the environmental protection, and how the environmental law can support the sustainable forest management?

The norms of environmental law and their impact on SFM

As far as the aim of a juridical norm is orienting individuals’ behaviour, the study of norms focused on the category of relationship that the norms are supposed to influence. These relationships constitute the juridical object of the norm. The norm might have also a material
object, which is represented by the forest to protect, by the endangered species, or by the item towards which the individual should have certain behaviour.

The norms that we consider in this paragraph are mainly substantive norms. The substantive norms address directly the protection of forests and forest vegetation. The law contains also procedural norms with role in implementing the substantive norms, e.g. rules of authorisation, penalties in case of infringement, responsible bodies for law implementation, etc. We used the classification substantive/procedural in order to facilitate the identification of “social targets” in environmental and forest protection: while the change of procedural norms can be a matter of improving efficiency, the substantive norms generally translate a social value, and they are set up for longer period than the procedural norms.

In this respect, the analysis of environmental law shows that the forests can be found in two sections of the Law 294/2003: the section on the protection of the natural ecosystems and the section on protected areas. The article 52 within the former section deals directly and explicitly with forests, forest vegetation out of forest estate, and grassland (which are the material object of the norm). The requested behaviour consists in prohibition of deforestation (change of land use category), harvesting within the annual allowable cut, complying of forest regime, and complying of rules of harvesting to protect the biodiversity and maintain the ecological equilibrium. None of the required attitudes do miss from the forest law. The novelty of the norm is to better precise the subject to whom one requests the above behaviour. The former law has been concerned with “holders” of forestlands, while the new one introduces also the managers of forestlands. A similar evolution has been made in the forest law, where the liability of implementing forest regime does not belong anymore only to the forest owners, but also to the forest managers.

Among procedural norms with impact on sustainable forest management, the article 35 provides incentives for afforestation, when it states that the fact to include the lands in the forest estate is free of taxes. Also, the article 55 strongly points out the normative role of forest management plans, e.g. a protected area can be declared so by normative acts, including the forest management plans.

The conclusion is that, even if the forests are considered only marginally in the environmental law, their protection is legally ensured. The legislator considers satisfactory enough to say “the forests are protected”, and then, “for that, the forests are to be managed according to the forest regime”. The responsibility of forests protection has been established in the charge of the authorities with role in implementing forest regime. Yet the devolution of responsibility to detail environmental norms towards sector-based regulatory authorities is a regular practice in the environmental law, it seems in the case of forests that the legislator fully agrees the idea that the protection of forests can be achieved through the forest regime.

Principles of EL and the forest law

In each law explicitly expressed or implicitly contained set of principles exist to offer guidance in interpreting the rules and in making new rules. In the environmental law the principles hold a key point in the juridical construction, because the environmental protection address a huge category of activities with potential impact on environment and then is almost impossible to nominate all actions to be done or not.

The law 294/2003 modifies some principles already present in the former environmental law. Thus, the guidance that the EL offers in the protection of forests contains the follow principles: the principle of prevention in tacking the decision; the principle of preserving the biodiversity and the natural ecosystems; the principle that the polluter pays; the principles of preventing the ecological risks; the sustainable utilisation of natural resources; the public participation in tacking environmental-related decisions. The law make reference to the individual’s right to a healthy environment, which has been recently introduced in the Constitutional law. This is of primary importance for the individuals or NGOs who have to prove a civil right when they act in the Courts for the environment’ protection. Finally, the
principle of objective liability, enounced also in the former law, comes as a corollary of prevention principle. Thus, whenever environmental damage has occurred, the liability is irrespective to the subjective intention (volition). This is one of the main derogation of EL from civil and penal law.

Except the principle of public participation, all other principles can be found in the spirit of forest legislation. The rule of annual allowable cut, the obligation to maintain the forest cover, the obligation of preserving the naturalness of ecosystem, e.g. rule of natural regeneration of forests, rule of local originated reproductive forest material, rule of re-introducing the originally natural forests in the area, etc., the limitation of clear cutting area and the promotion of intensive sylvicultural treatments are on-line with the guidelines provided by the EL. Also, the principle of objective liability is implemented by way of the forest owner’ obligation to preserve his forest from theft, forest degradation, overgrazing, etc.: in long run, the theft produces an environmental damage, so the owner is liable if cutting of trees occurs, do not matter who did it.

Nevertheless, the forest law does not contain any reference to the environmental law or to the rules of environmental protection, e.g. specify that environmental principles should be of prior use in case of conflict between the environmental norms and forest norms. The forest law focuses on uphold of forest cover, organisation of forest administration and forest management planning, which translates in fact which are the main stressing problems that the forestry sector is faced with. For example, the law does not contain any rule addressing directly the biodiversity: there is an implicit supposition that the forest management plans are enough adapted to do that. With this respect, a gap appears in the legal framework: if the environmental law delegates the forest biodiversity protection to the sector-based policy, and if the forest law does not address this issue, neither make reference at the environmental law as general legal framework, how does the only application of forest management plan guarantee the biodiversity protection? Up to now, the biodiversity is addressed within the framework of protected area and hunting regulations, but there is a need of systematic approach of biodiversity conservation issue in the forest law.

Conclusion
The recent environmental law supports the sustainable forest management by the instruments it proposes in environmental assessment, by improving the financing procedures, by creating the legal bases of administration of protected area. The relationship between environment and forest law is from general to special: the special law (forest in this case) is of immediate implementation. Nevertheless, no specification exists that environmental principles should be of prior use in case of conflict between the environmental norms and forest norms, neither that the missing rules in forest legislation should be completed with the environmental rules. These two principles are of common use to build a hierarchy of norms in the general law.

Also, the analysis of institutional framework for implementing law shows the need of better cooperation between environmental and forest authorities, particularly in the process of inventorying biodiversity sites (network Emerald, Natura 2000). Lack of references to the biodiversity concept in the forest law makes us conclude that this issue is not regarded as a priority of forestry agenda and legislation. On the other hand, there is potential conflict between instruments proposed by forest policies (the forest management plan) and the EIA, and a lack of public participation and information in forest-related decisions. Although good premises exists within the forest law and forest management planning to be environmentally-friendly, the sector-based forest policy fails to convey its ecological values towards the society.

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INTERVENTIONS AND RESTRICTIONS ON PROPERTY FOR THE benefit of environment, forests and other natural resources in Turkey

by Sedat Ayanoğlu

Abstract
Existing Turkish legislation has many interventions and restrictions on private property for protection of environment, forests and natural resources. Those interventions and restrictions are originated from the Turkish Constitution dated on 7 November 1982.

Article 43 of the Constitution has rules about sea coasts, lake shores and river banks.

Article 44 of the Constitution contains rules about taking the necessary measures to maintain and to develop efficient land cultivation and to prevent it’s loss through erosion.

The article 46 prescribes the content of expropriation and states that, “The State and public corporations shall be entitled, to expropriate privately owned land estate when the public interest requires it with the condition to pay the price in advance”

In Article 47 of the Constitution, nationalization is described. The article states “Private enterprises performing public service may be nationalized when this is required by the exigencies of public interest. Nationalization shall be carried out on the basis of free market value. The methods and procedures for calculating free market value shall be prescribed by law.

Article 56 of the Constitution contains the provisions about the right of environment.

According to the article “It is the duty of the State and citizens to improve natural environment, and to prevent the environment from pollution. The State shall fulfill this task by utilizing and supervising the health and social assistance institutions, in both public and private sectors”.

In Article 168 of the Constitution, exploration and exploitation of natural resources are described.

Strict rules exist in article 169 about the protection and development of forests. Besides of those rules of Turkish Constitution, many interventions and restrictions take place in related acts, which aim to protect environment and natural resources.

An outline of interventions and restrictions are briefly presented in this paper.

The Rules Of The Turkish Constitution Relating to Protection of the Environment and Forests

As a result of abusing environment and forests between the years 1946 and 1960 the lawmaker of Turkey gave place to strict rules in the constitution of 1961. Those rules also took place in the new constitution of 1981.

- Article 35 is about the right of ownership. According to the first Paragraph of the article everybody has the right of ownership and heritage. Second Paragraph of the article gives the Parliament the power of limitation of those rights for common benefit. According to third Paragraph of the article nobody can use those rights against common benefit.

Besides Constitutional limitations, there are many acts that in force including various limitations on the right of ownership as explained below.

Article 43

This article is about benefiting from seashores. According to the first Paragraph of this article shores are under State’s power and control.

The second Paragraph of this article is about to care common benefit on using seas, lakes, rivers and their coastal zones.

Third Paragraph points out that utilization facilities and conditions of those objects will be regulated by Law. According to this Paragraph the Parliament enacted “The Shore Act” on 4

**Article 44**

This article gives many tasks to the State. According to this article the State takes necessary measures for protection and amelioration of soil, preventing soil erosion, increasing agricultural productivity and providing farmland to farmers who have not enough. The size of land to be distributed can be determined according to different agricultural districts or different kinds of farmland by the Parliament. Providing land to landless farmers should not cause decrease in production, forestlands or any other natural resources.

Lands distributed for this goal cannot be divided and cannot be transferred to other people. Only farmer and his/her successors can exploit distributed lands. In the situation of disappearance of those conditions, Law regulates rules for return of land to the State.

According to this Article “Agricultural Reform Act In Irrigable Agricultural Lands” was enacted in 1983.

**Article 45**

According to this article: The State simplifies providing necessary instruments to farmers for preventing abusing and destroying farmlands, pastures and grasslands and for increasing agricultural production in appropriate to agricultural planning rules.

**Article 46**

This Article of the Constitution regulates legal expropriation (compulsory purchase) of land. According to the first Paragraph of this article, the State can expropriate or establish administrative servitudes (Easements) on lands under private ownership in accordance with public benefit.

According to the third Paragraph of this article the value of expropriation have to be paid in advance. But; expropriation value can be paid by installments in five years in realization of projects about energy, irrigation, settlement, afforestation, tourism and protection of shores.

**Article 56**

This article gives to everyone the right of living in a healthy and balanced environment. It is the task of the State and citizens to protect the environment and environmental health and to prevent environmental pollution. In accordance to this direction The Environment Act No. 2872 was enacted in 1983. This Act has many interventions and restrictions on property.

**Article 63**

According to this article the State provides protection of historic, cultural and natural possessions and their values and takes supportive and encouraging measures for this aim. Limitations will be set on those possessions in private ownership; Law regulates aids and exemptions to be given to owners of those possessions.

Depending to this article Turkish Parliament enacted “The Law For Protection Of Cultural and Natural Possessions” on 21.07.1993 (This act come in to force instead of The Act numbered 7305 and dated 27/05/1959).

**Article 168**

According to this article natural possessions and resources are under the authority of the State. Searching and exploitation rights of those resources belong to the State. The State can transfer those rights to private persons or corporate bodies. According to this Article, the Parliament enacted “The Mine Law” on 4.6.1985.

According to the Article 7 of this Law, mining activities on forest areas are dependent on the permit of Ministry of Forestry.

**Article 169**

The Section 169 of the Constitution 1982 presently in force is “Protection and Improvement of Forests”. It defines the forest regime as follows:

a) All forests are under the power and control of the state. This power of the state covers both public and private forests.
b) **Ownership of state forests cannot be transferred.** This rule is criticized by supporters of privatization with the argument that forests will be better protected if privately owned, than public ownership. This argument has not any rightfully dependence, because privately owned forests are in very bad conditions and their owners often apply to the State Forest Service for better protection.

c) **State forests managed and exploited by the state according to the Law.** This rule gives the task of managing state forests to the State and hinders their exploitation by private persons. The principal of the state exploitation is hardly criticized. The 59th. government tried to change this rule and prepared a draft law and gained a success to pass it from the parliament but annulled by The Court of Constitution.

d) **State forests cannot be acquired by acquisitory prescription and cannot be subject to the right of servitude, except for the public benefit.** Application of the rights of servitude resulted in complete failure and destruction of the forests. The term of “public benefit” was interpreted in different ways. The Administration loosely interpreted this concept and dedicated forest areas to private use. Municipalities were permitted to use forests as repositories at garbage. The duration of the “right of servitude” is 49 years and it could be extended to 99 years. Abusing of this right came to end with a decision of the Court of Constitution last year. The Court annulled third and fourth paragraphs of article 17 of The Forest Law which are legal dependence of establishing the right of easement on forest areas.

e) **General or special amnesties can not be declared exclusively for forest crimes.** Crimes of burning, destructing or reducing forest areas can not be included in to the content of a general or special amnesty. This is also a necessary limitation, because politicians have a strong trend to announce general or special amnesties. Statistics of forest crimes clearly shows that forest crimes increase two or three times more on election periods.

f) **The state establishes and imposes laws and takes other necessary measures to protect and extend forests.**

h) **Harmful activities to the forests are forbidden. Political propaganda which will be harmful to forests are not permitted.** (This rule proved to be non effective because no punishments were provided in the related laws. Some politicians encouraged people to occupy forests. Also political propaganda is going on about forests).

i) **The boundaries of the forests can not be changed.** This rule has two exceptions: the first exception is the places, which are clearly not beneficial as forest but better used as agricultural land. Second exception are places which totally lost their character as forests before the date of 31 December 1981. Places reverted to agricultural or grazing land or reverted to settled land as village, town or city constitute this category. (This exception firstly occurred with the alteration of section 131 of the constitution by the law numbered 1255 in 1971 and named as “taking out of forest”. Between the years of 1974 and 2004 approximately 476,000 hectares of forestland was taken out of forest and the application of this rule is still going on. The State is trying to provide important revenue by selling those lands to occupiers who are committing a forest crime. This is the most significant weakness of the present forest regime. People are being encouraged with this regulation to commit forest crime. Present Government also tried to change those rules in order to simplify the selling procedure, but the Court of Constitution annulled this regulations considering that they will lead to new occupations of forest lands and awarding to the people who committed forest crimes.

**Article 170**

According to this article; cooperation between the State and forest people for development of forest villages and for the protection of forest integrity, evaluation of the places which lost their character as forest before the date of 31.12.1981, fixation and exclusion of places which are clearly not beneficial to conserve as forest, improvement of those places by
State and granting them to forest people and settlement of forest villagers on those places are regulated by law.

Depending on this article “The Law About Supporting of the Development of Forest Villagers” was enacted by the Parliament on the date of 17.10.1983. Above mentioned rules of the Constitution and the Law numbered 2924 couldn’t be applied exactly. In the period which is more than ten years just 6700 ha. of forest land was sold by Ministry of Environment And Forest from total area of 476 000 ha. was taken out of forest. This problem has been locked on this point because of the decisions of The Court of Constitution. According to the Court those lands only can be sold to forest villagers, but present occupiers are not forest villager of those lands.

**Limitations And Interventions Which Are Originated From Laws**

1- **Turkish Penal Code**

Articles 513 and 516 of Turkish Penal Code contains some protective rules for movable or unmovable property against the harmful actions.

According to the article 513 anyone who changes or destroys boundaries of any property belonging to anyone for seizure, disposition or utilization from it will be sentenced from two months to two years and will be fined for from 150 to 1600 TL. This rule covers the actions which committed against to common lands and pastures. The Law of Pastures No. 4342 and dated 25/02/1998 also refers to this rule of Penal Code.

2- **Turkish Civil Code**

Turkish Civil Code also has many rules which protect environment, forests and natural resources. All restrictions which are originated from Law are effective without registration on the land registry according to the article 731 of This Law. Restrictions which were put on for public benefit cannot be changed and abolished. Anyone who suffers from any harm or any danger on the consequence of using the right of property against the restrictions of public benefit by the owner of the land can request to indemnify of the harm or danger (Article 730). Everybody is compelled to avoid from overflowing which will disturb his neighbors. For example; to annoy neighbors by exhausting smoke, dust, smell etc. and by making noise or shaking (Article 737).

This Law also has some rules to protect from the agricultural exploitations which shows economic unity from dividing between successors and some other rules about gathering land which are divided into non economic pieces.

3- **The Law of Environment**

The objective of this Law is to govern the arrangements to be made and the measures to be taken in order to protect and improve the environment, which is the common property of all citizens; to protect and make optimal use of the land and natural resources in rural and urban areas; to prevent water, soil and air pollution; and to improve and secure health, civilization and living standard of the current and future generations by preserving the fauna and flora, and the natural and historical assets.

Article 3 of the Law concerns the protection of the environment and the prevention of environmental pollution. Article 9 stipulating the measures to be taken at the preservation of the protected areas in accordance with “Protocol On Specially Protected Areas In The Mediterranean” June 20,1986 and “Barcelona Convention” of February 16,1976. By this article the following are prohibited: overuse and misuse of resources, disturbing the balance of the Country’s basic ecological systems as a result of any kind of imported waste or garbage, endangering the reproduction of any species of plants or animals, and causing the destruction of natural assets.

4- **Cultural And Natural Assets Protection Law**

Article 1 of this Law numbered 2863 and dated 23 July 1983 declares the aim of the law as to protect natural and cultural assets. Article 3/a-5 defines the preservation areas as the regions within which unmovable cultural and natural assets and their surrounding.
Article 7 of The Law is about classification of cultural and natural assets and the principals and criteria of the classification. According this article of the Law, Ministry of Culture is responsible to take the necessary measures to safeguard cultural and natural assets and control their application. Article 16 prohibits any kind of construction unless a proper licence is obtained in the areas where the natural and cultural assets are located. This system created financial problems for proper restoration and alterations.

5- The Bosphorus Law
This Law numbered 2960 and was enacted, 18 November 1983. This Law divides the lands in several zones on the shores of the Bosphorus and prohibits to build any kind of construction on the frontal zone except movable structures and restricts the right of building in other zones. This Law also has some rules to protect forests and other woodlands within the Bosphorus.

6- The Coastal Law
As it was shown before coasts are under the State’s control and power according to the article of the constitution. This Law numbered 3261 and dated 17 April 1990 regulates the details of benefitting from sea shores in accordance with this rule of the constitution. Those rules prohibits to build any kind of construction on coastal zones which will be determined with construction plans or other special laws.

7- The Mine Law
According to the article 168 of the Constitution and this Law numbered 3213 and dated 4 June 1985, mines are under the control and authority of the state. Application of this law gives serious damages to coastal zones and forests. Some politicians and the mine lobby are trying collectively in order to make the protective rules for the natural and the cultural assets uneffective. According the draft mine law which is discussed now in the Parliament, mine searching and exploitation workings will be totally free in preservation areas as national parks, nature parks, natural monuments, coastal zones, pastures, olive groves etc.

8- Forest Law
This law numbered 6831 and dated 31 August 1956 which is the main law on forestry has many restrictions and interventions on the right of ownership on private lands and forests. It will be useful to look at the legal regime of forests before explaining those restrictions.

a- Turkish Forest Regime
The forest regime is defined as “The strict rules applied to forests by the administration agents for administrating them” (GUYOT, 1968). Those rules serve to protect the forest ownership, which has a real executive power over this unmovable object.

This definition of the forest regime according to the rules of forest laws applied to unmovable objects such covered with trees is an obligatory status that constitutes an exception to the laws applied to the unmovable objects generally. Thus, forest regime is considered as an “acte-regle” in general classification.

The public character of the forest regime has two consequences; 1) agreements in conflict with this regime are invalid (absolute nullity), and 2) this regime can not be divided and can not be applied partially. There is no need for a special agreement between the forest owners and forest administration. The legal forest status is compulsorily applied.

This definition, because of its public character, cannot be extended and the boundaries of lands considered as forest according to the forest laws are clearly demarcated.

Generally forests are accepted as public property. They are administrated with a more protective regime than that applied to other public properties. Turkish forest regime is based on the same principles. Application of this regime, however, results in some conflicts between the forest administration and citizens. This regime is weakened as a result of political manipulations with some regulations contrary to the Constitution. These manipulations generally hinder and damages forests, which are under the protection of the Constitution.

Because of their social importance forests are accepted as common good and therefore kept under the care and control of the state. They are public domain and have a special status among

Public properties are subjected to a protective regime according to the Turkish Law. This regime can be summarized as follows:

a) Public domain cannot be transferred to private ownership.
b) Public domain cannot be owned by acquisitory prescription.
c) Public domain is not dependent on registration.
d) Public domain cannot be distrained.
e) Public domain cannot be mortgaged and pledged.
f) Utilization of public domain is dependent on some permission, license, privilege etc.
g) Except for public benefit, right of servitude cannot be established on public domain.
h) Public domain cannot be the subject of compulsory purchase.
i) Public domain is exempted from any kind of tax, fee etc.

Forests are public domain and are dependent on this general regime, but constitutional and legal regulations indicate that forests are subjected to a special regime among public domain (ONAR, 1960).

In the following the definition of the forest according to the Turkish Law, the limping parts of forest regime and wrongful applications of it are given and criticized.

b-The Land Accepted As Forest

According to the Forest Law the community of trees and shrubs grown naturally or artificially together within an area are considered as forest. This definition needs some explanations. “The Regulation of Forest Cadastre” defines the terms as “tree”, “shrub”, “community” and “area”. According to the 20th. paragraph of the Regulation still in force:

a) the trees are the plants of at least 8 m, or more in height, have crowns and the wooden stems, at any age or diameter;
b) shrubs are the woody plants showing generally horizontal growth and their height is less than 8 m. when they are mature;
c) community is a group of trees and shrubs occupying an area with a density of 0.1 or more.

Additionally we have to consider the principles explained below while deciding:

In the areas, which can give the benefits expected from a forest, which receives care continuously or periodically, density limit is not applicable.

Also the areas exposed to the risk of erosion, and the areas important for the climate and water regime can be considered as forest even if the density is under 0.1.

d) areas are defined as places covered by the trees and shrubs or deforested as a result of human activity or natural events.

For the private forests there is a size limit. Areas smaller than 3 ha. are left outside of forest regime. This limitation has been subject from time to time for arguments. It is, however, considered proper for encouraging the public to own forests, for exciding the creation of the unnecessary problems and for assuring the provision of wood for them.

This definition can be criticized in several aspects. First of all it is a deficit that it doesn’t describe open spaces in the forests and the areas serving the forests. Also we can criticize this definition because it doesn’t mention any rule about the areas, which should be afforested (potential or reserve forests).

The areas fitting the above definition are included in the forest concept and have been the subject of this regime. This system however has to permit exceptions as shown below.

c- Areas that are not considered as forests

According to the 2nd. paragraph of the 1st. section of the Forest Law in force;
a) marshy places,
b) areas covered with step plants,
c) thorn bushes,
d) parks,
e) places covered with trees and shrubs in the ancient graveyards in towns and villages, and city parks,
f) places covered with trees and shrubs in groups within agricultural lands or private property which are in or near forests,
g) places covered with trees and shrubs, not larger than 3 ha. far from the forest and privately owned,
h) Areas containing fruit trees already mature or those to be grown in the future including Pinus pinaster and Quercus aeguilops trees within private property,
i) privately owned areas covered with olive trees, wild or domesticated by grafting; wild olive groves separated from state forests by special laws and fulfilled the conditions to private ownership, and groves of Pistachio, Carob and Mastic trees, wild or improved by grafting as specified by the law no.6777 (9th July 1956),
j) areas of maquis or heather not subject to soil erosion are not considered as forest.

Areas specified in the paragraphs (a), (b), (c) are suitable for wild life. Except those under private ownership they are under the state control. By participating in the international agreements on the protection of wild life and biologic diversity, the State has the obligation to establish new regulations for the protection of these areas.

Paragraph (f) does not accept areas within the agricultural lands, which contain trees in groups or dispersed, or in the form of single rows as forest. There is no size limitation in this exception. It permits most of wooded areas in river beds (Gallery forests) and remainder of the old forests to be taken out of the forest regime. Those areas are also important for wild life. Moreover, they have erosion and flood control effects. Therefore they have to be protected whatever the kind of ownership might be.

Paragraph (g) does not include wooded areas smaller than 3 hectares as forest. This exception is also criticized. It is claimed that these areas were originally, and that 3 hectares cover a large space (CANTÜRK, 1995). But it should not be forgotten that in case of abolishing of this exception the farmers with a small grove, or coppice for his own use, would suffer hardship.

Paragraph (h) excluded P. pinaster and Q. aeguilops groves from forest regime. This exception is also criticized. Because, these species are considered forest trees. This exception resulted to transfer of thousands of hectares of P. pinea groves to private ownership and destroying them. Present government tried to annex the Castanea and Alnus groves to those exceptions but the Constitution Court has cancelled the rules relating to the articles of the Law No. 4999.

Paragraph (i) is related to lands separated from forest by special laws for amelioration of olive groves. In the application of this rule before the constitution of 1961, large forest areas which including only ten wild Olive trees taken out of the forest regime, and distributed to farmers. Most of those Olive groves demolished and reverted to settled land because of the absence of protection measures in this Law.

The prime subject of criticism was on the exception applicable to the Heather and Maqui groves. In spite of their importance those lands were subject to a variety at regulations in last fifty years. Most of the land covered by maquis were taken out of forest regime by the administrative regulations in conflict with the rules of the Law No. 5653 in the year 1950. In 1967 such areas reached nearly 600,000 hectares. Maquis and areas covered by and heather not subject to soil erosion are not accepted as forest. Recently the Forest Administration showed great sensitivity on this subject, but pressures for separate dedicating them to other usage other than forests hasn’t come to an end. It is necessary to remove them from the exceptions and to provide proper protection.

d- General Restrictions Of The Law

As mentioned above Turkey has a strong forest regime, which includes many restrictions and interventions. Important of them are mentioned below.
1- Article 3 gives the power to The Council Of Ministers to take the places in to the forest regime, which will be useful to country and people from their historic, cultural, and tourism value.

2- Also article 13/B gives the power to the Council Of Ministers to migrate forest villagers which have not seen any possibility to develop in their place or have seen compulsory to migrate them because of water and soil balance.

3- According to the article 14 illegal felling or wounding of trees or cutting or pulling up saplings, making charcoal, extracting tar or resin from trees, collecting seeds of forests trees, fishing with dynamite or poison in river or dam reservoirs and lake reservoirs are forbidden.

4- Article 17 forbids every kind occupation on forest areas. According to the rules of this article any kind of construction can be built on forest areas and those areas cannot be registered to the land registry. Those places directly seized by forest administration.

5- According to the article 18 any kind of factory for wood processing cannot be build up without the permission of forest administration. Establishing any stone, sand or soil mine near the forests up to 1 km. or building wood using factories as sawmills and strips, mines, turpentine etc. in the zone up to four km. to forests requires the permission of forest management.

6- Article 19,20,21 and 22 of the law are about grazing on pastures in forest areas. Villagers have to go to pastures within the forest from the ways, which will be determined by forest administration.

7- Articles 23 and 24 are about protection forest. Article 23 has describes the protection forests. Article 24 gives the power of confiscation to the Council Of Ministers for the areas, which are needed to establish a protection forest.

8- Article 40 gives the right of priority about afforestation, rehabilitation and production works in state forests. Private companies cannot do those kinds of works.

9- article 41 regulates the transportation forest products. Forest Products cannot be transported without the seal and transportation document of forest administration. Presently this article has been changed by the Law 4999 and given the permission to transport forest products with invoice and similar document.

e- Restrictions About Private Forests

Constitutional forest regimen allows private ownership on forests. The forest regime applied to the private forest is as follows:

Private forests exploited with management plans, which has been prepared by the owners and approved by forest administration. Sections 14, 15, 17, and 19 of the Forest Law are applicable to these forests. Consequently actions such as cutting or harming trees, occupying forestland or building any construction on it are forbidden even if done by their owners.

Products harvested from these forests are also sealed and transported with a “transporting document”.

Naturally growth private forests cannot be divided into parts smaller than 500 hectares their ownership cannot be transferred to other person. They also cannot be divided between successors.

According to section 17 of the Forest Law the owners can construct buildings on the land covering not more than % 6 percent of total area of these forests if they are close to settlement areas. The owners also abuse this provision. Areas covered with forest trees bigger than three hectares are accepted as private forest and must be exploited with management plans as above mentioned.

9-National Parks Law

Article 1 of this Law no.2873 and dated 11 August 1983 specifies the aim of the Law as to protect national parks, national monuments, nature parks and nature protection areas and hand over them to next generations. Article 2 clarifies the Natural Park, natural monument, and nature park and nature protection area concepts. Article 3 and 4 are about the designation and
planning of those areas. When a place designated as national park or other protected areas forest administration stops any kind of wood production activity and also municipality’s stops architectural activities until the long-term development plans prepared by the Ministry. While those plans are delayed because of financial problems the people who lives within those areas are begin to face many difficulties.

Article 14 of this Law; natural and ecologic equilibrium and natural ecosystem value may not be spoiled, wildlife may not be destroyed, interferences of all kinds which may cause change the characteristic of these areas as well as activities or works that will create soil, water and air pollution or similar environmental problems may not be performed, production activities of forest products, hunting or grazing which will spoil the natural equilibrium may not be carried out, Unless otherwise required definitely by public interest and excepting the structures and facilities specified in the approved plans as well as the facilities required for the defense system , no facility may be built ,nor operated ; furthermore no inhabitation shall be permitted outside the places of settlement. According the article 20 of this Law in case the crimes or offences prohibited by Forest Law No. 6831,The Hunting Law No. 3167 and water Products Law No. 1380, are committed in the those areas penalties shall be executed by two times more.

Conclusion
The history of the Turkish Forestry can be summarized as “forest abusing”. That’s why Turkish Forest Legislation has strict rules about forest protection. In early times benefiting from forests was almost free of charge and access to forests were free. The first Forest Statute was put in force in 1870. With this Statute, it was tried to regulate the benefiting from forests for the purpose of increasing state revenues. With the “Coppice Law” in 1920 around 2 hectares of coppice was given to every family in forest villages. Scientific benefiting from forests started in 1920 by the Laws 424 and 504. These laws accepted the principle of “using forests according to the rate of their power”.

In the year 1937 the first modern forest code was put in force (Forest Law no. 3116). This code was based on the following three principles: (i) state ownership; (ii) state exploitation; and (iii) sustainability. Those principals were originating from abusing forests by people and private agencies as well as foreign companies. By the Law No. 3116, the permissions of foreign companies and harvesting rights by private persons in the state forests were cancelled and the State begun to expropriate forests on a large scale . Free benefiting from forests was also abrogated. Difficulties in expropriation were solved with the Law No: 4785 in 1945. According to this Law, all existing forests were nationalised automatically. This Law also extended forest definition. 28 private forests were nationalised at the first step, but nationalisation could not be completed all over the country since cadastral surveying of the land was not completed. Cadastral surveying of forests is still not completed. 67 percent of the total area has been surveyed up to present. This law is still in force and implemented in cadastral surveying and conflicts.

This decisive policy was changed in 1950 by the Laws No: 5658 and 5653. With the Law No: 5658, nationalised forests were given back to their owners under certain conditions and with the Law No: 5653, maquis, which do not have protective or erosion control functions, were excluded from the forest definition. Government began to separate maquis from forests and distribute maquis groves to farmers. By this application, approximately 700.000 hectares of maquis groves were separated. In 1956, the present Forest Law no. 6831 was enacted. In the period of the years 1950-1960, five general amnesties were declared. In this period, forests were severely abused and occupied. For this reason, strict rules were put in force by the Article 131 of the 1961 Constitution as well as by 1982 Constitution. That story successfully express that why Turkish constitution unusually has strictly and detailed rules.

It’s a pity that above summarized restrictions and interventions are insufficient to protect environment, forests and other natural resources. Those protective rules are only put in
force on interrupting periods of Turkish democracy. Most of the politicians try to spoil those rules for taking the votes of citizens. Past and present governments prepared many law drafts for this aim. Some of them cancelled by the The Court of Constitution as mentioned above, some of them are still discussing in the Parliament and unfortunately some of them are accepted.

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TRANSLATION EUROPEAN FOREST LAWS INTO NEW IRANIAN FOREST LEGISLATION

BY MOHAMMAD MASOUD GHELICHKHANI AND AFSHIN AHMADI

Abstract

As that’s evident, forest legislation in Iran and in many European countries especially in central ones comprises a similar base. Hence it is any change accrued in European forest law in any case would influence on Iranian forest code.

Like European countries in last years because of some matters regarding social, economical and environmental topics; need to some amends as regards forest legislation was felt in Iran.

Handling private, common and state situation of forest in addition to utilization with along restriction and reserves areas have been the most objectives in this context.

Recent relevant enterprises in European countries from region of Balkan to Latvia as well as Romania to Austria and Germany have been good inspiration and pattern over regulating new forestry laws in Iran.

Land registration, marketing of forest material, supervision, making harmonization between private and public forest beside respect protected areas considering compensations have been issues focused in Iran (1999-2004) as have been elaborated in most of European countries in recent years.

The Symposiums on Legal Aspects of European Forest Sustainable especially 4th and 5th IUFRO WG 6.13.00 were high approach for Iranian (and surly many countries around) forest policy makers and stakeholders to transit European Forest Laws into New Iranian Forest Legislation to cope the related problems and getting a rise about.

Key Words: European countries, forest laws, Iran, forest legislation.

Introduction

The 1648195 square km of the Iran include 124260 square km (7.5%) forest and forestland. Large and valuable part of the forest area belongs to the Caspian Region (23%) 28633 square km. About all forest is national but mainly managed by state 69% and communal 29% plus other public owner (2%).

Forest is categorized by their primary function into timber productive forest (83.3%), protective forest (10%) and other (67%) forests for special purposes (Scientific, Recreational, protected, Forest park, etc).

Management of timber productive forests is based on successive regeneration felling for even-aged and selective felling for uneven-aged considering processing silviculture close to nature.

Table 1. Ownership, growing stock, and increment & felling

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Total Growing Stock</th>
<th>Annual increment (I)</th>
<th>Annual Felling (F)</th>
<th>Index (F/I)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>000 m³</td>
<td>%</td>
<td>000 m³</td>
<td>000 m³</td>
</tr>
<tr>
<td>State</td>
<td>691.487</td>
<td>72.5</td>
<td>8693</td>
<td>3303</td>
</tr>
<tr>
<td>Communal</td>
<td>236.652</td>
<td>24.8</td>
<td>4318</td>
<td>4152</td>
</tr>
<tr>
<td>Other public</td>
<td>257.70</td>
<td>2.7</td>
<td>316</td>
<td>309</td>
</tr>
<tr>
<td>Total</td>
<td>953.909</td>
<td>100</td>
<td>13327</td>
<td>7764</td>
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</tbody>
</table>

84
Table 2. Forest Tree Species Composition in total growing stock (2004)

<table>
<thead>
<tr>
<th>Species</th>
<th>Total Growing Stands</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>m³</td>
</tr>
<tr>
<td>Beech</td>
<td>195250000</td>
</tr>
<tr>
<td>Blue beech</td>
<td>146985000</td>
</tr>
<tr>
<td>Oak</td>
<td>139637000</td>
</tr>
<tr>
<td>Maple</td>
<td>65942000</td>
</tr>
<tr>
<td>Poplar</td>
<td>48837000</td>
</tr>
<tr>
<td>Fir</td>
<td>44395000</td>
</tr>
<tr>
<td>Other broad leaves</td>
<td>128967000</td>
</tr>
<tr>
<td>Soft broad leaves</td>
<td>45596000</td>
</tr>
<tr>
<td>Other conifer</td>
<td>10751000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>826360000</strong></td>
</tr>
</tbody>
</table>

A long time traditional forestry until last 4 decades has resulted in about 91% of forests with a natural structure.

**Principles of forestry policy.**

The basic principles of the Iran forest policy are national ownership and sustainable utilization.

Forest and forestland of Iran are managed according to “Forest Management Planning” that has to be approved by the Ministry of Agriculture and Forestry. Almost all forestry project are put out to tender, first within a period of 10 years then would be extended for many 10 years long periods as long as the company who woned the tender does it’s commitment based on tender agreement.

According to the plan, manager must respect sustainable maintenance of stability & quality of useful forest function such as: re-forestation, appropriate cutting & construction of forest road.

In the case of there is no any appropriate tender applicant the Ministry of Agriculture undertakes the forest program implementation by itself as well as if any tender winner can’t do well according to wanted requirements

**Background of Forest Legislation**

The main features of forest law are:

- All natural forest belong to state so are national even privates have formal document.
- Individuals ownership on properties is respectful
- Managing and utilizing of forest must be done through forestry projects
- Protection of rare species and damaged forest is necessary
- Takes into consideration of multiple forest function

To enjoy sustainable forest, clear cutting and charring in mountainous forest is forbidden as well as uprooting In addition to taking away leaves and humus, browsing and making fire in forest. To preserve of natural diversity of forest, cutting and taking away dead trees explicitly is forbidden.

The main matters in commercial forest consist in logging illegally by smugglers in addition to animal husbandry in forest. From years ago; the organization of forestry has begun to implement “ expulsion domesticated animal from forest program” as well as “centralizing of forest inhabitants program” but the work is huge and consequently needs more time.
To enjoy sustainable forest, clear cutting and charring in mountainous forest is forbidden as well as uprooting. In addition to taking away leaves and humus, browsing and making fire in forest. To preserve of natural diversity of forest, cutting and taking away dead trees explicitly is forbidden.

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**Current Process**

Lately from 2001 dept of forestry & environment of Ministry of Agriculture considering current matters related to nowadays problem and needs mostly arises from social and economical issues began revising the Iranian forest code.

The most considerable matters over forestry in Iran consist in wood smuggling (illegal logging) in addition to animal husbandry in forest.

According to estimates about half of all logging in Iran is illegally approximately 3 million cubic meters! On the other hand there are 80,000 families scattered exist in Caspian Forest with 3.7 million domesticated animals that grazing forest regeneration.

This act may wouldn’t be as what would perform in countries like Latvia (example by tax reduction) or Germany (by reward system) but that follow the same subject; public interests with along privates rights. Other subject under discussing recognized to be necessary to consider consist in giving attention to multiple forest function more than what paid attention over forest in past. Just as mentioned during the meetings this subject is a fundamental issue for other subject in all country. Hence although 12.3% of Iranian forest area is protected within the network of National Park, National Park and Forest Park nevertheless the plan is increasing up to 150% in five years. Forestry authorities tried to arise such protected areas through extending ecotourism to compensate income deficiency because of forbidding logging. Also other related activities like pharmacy, ecotourism and landscape are encouraged (about 3% of all forest income).

Regarding such matters and to use new methods and technology need have some changes in forest legislation have been felt. In first step In 2003, the national consultative assembly approved “Conservation and Protection plan for Northern Forest of Iran” proposed by Ministry of Agriculture. The program included operative prohibition of smuggling as well as renouncing of wood as fuel through using other energy resources plus importing wood to reduce logging in Iran forest.

Also, due to the program, whole domesticated animal must be exited from forest and forestland (The article was approved in 2003) reducing in small forestland at the moment of denationalizing is forbidden.

All the above; in recent years the forest authorities felt a need to modify ownership statuses effaced from forest ownership transferring in European countries. The European ways and process have been a good pattern what we got during “5th IUFRO WG 6.13.00 International Symposium on Legal Aspects of European Forest Sustainable Development, 2003 “ and review 4th proceeding.

The forest stakeholders found out that national ownership may be good to protective purpose but not suitable for utilization purpose. Responsibility over forest utilization under state of individual ownership is more efficient to get favorite goal as we’ve seen in many European forest in the meantime emphasizes during the meetings. Hence government decided to allocate some activities to individuals but since handling system of forest in Iran used to just state ownership exclusively then such transformation of ownership in one step and quickly would product some serious matters so a decision made to form a mutual way. Afterwards (from 1995) some forest projects are given to Cooperative Forestry formed from woodsmen.
These cooperative societies sometimes receive subsidies as a motive to do their best over forest improvement as well as stopping immigration to cities.

This act may wouldn’t be as what would perform in countries like Latvia (example by tax reduction) or Germany (by reward system) but that follow the same subject; public interests with along privates rights. Other subject under discussing recognized to be necessary to consider consist in giving attention to multiple forest function more than what paid attention over forest in past. Just as mentioned during the meetings this subject is a fundamental issue for other subject in all country. Hence although 12.3% of Iranian forest area is protected within the network of National Park, National Park and Forest Park nevertheless the plan is increasing up to 150% in five years. Forestry authorities tried to arise such protected areas through extending ecotourism to compensate income deficiency because of forbidding logging. Also other related activities like pharmacy, ecotourism and landscape are encouraged (about 3% of all forest income).
Introduction and Turkish forest legislation

Turkey is a European country covering almost 77 million hectares with important environmental values such as its forests, occupying 26% of the surface area, 21.7 million hectares. 27% of the rest of surface area is meadows and pasture, 11% is settlement areas, 1% is lakes and rivers and 35% is agricultural land as shown in figure 1 (Konukçu 2001).

Some 99% of the Turkey’s forests are owned by the State, the rest 1% is owned by public legal entities that adds to 140,000 hectares, and private landowners that is about 43,000 hectares, including timber companies, and the rest is owned by other bodies such as foundations etc. as shown in figure 2 (DPT 2001).

Figures 1 and 2: Land Use and Forest Ownership in Turkey.
In the Constitution dated 1982, it is explicitly stated that forests should be managed and operated by the State. Besides, the Constitution contains articles for the protection and maintenance of forests; such as article 169 stating “No permission may be given for any operation and action that give harm to forests”. The duty of administration of forests is given to the Ministry of Environment and Forestry established in 2003.

<table>
<thead>
<tr>
<th>Forest type</th>
<th>Productivity level</th>
<th>Area (ha)</th>
<th>Growing stock (m³)</th>
<th>Annual increment (m³/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(%)</td>
<td>(%)</td>
<td>(%)</td>
</tr>
<tr>
<td>High forest</td>
<td>Productive</td>
<td>8,237,753</td>
<td>1,032,740,659</td>
<td>25,533,479</td>
</tr>
<tr>
<td></td>
<td>Degraded</td>
<td>6,180,587</td>
<td>63,665,915</td>
<td>1,325,792</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>14,418,340</td>
<td>1,096,406,575</td>
<td>26,859,271</td>
</tr>
<tr>
<td>Coppice</td>
<td>Productive</td>
<td>1,789,815</td>
<td>107,828,760</td>
<td>6,494,873</td>
</tr>
<tr>
<td></td>
<td>Degraded</td>
<td>4,555,093</td>
<td>31,351,324</td>
<td>948,823</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>6,344,907</td>
<td>139,180,084</td>
<td>7,443,696</td>
</tr>
<tr>
<td>TOTAL</td>
<td>Productive</td>
<td>10,027,568</td>
<td>1,113,612,229</td>
<td>30,404,634</td>
</tr>
<tr>
<td></td>
<td>Degraded</td>
<td>10,735,680</td>
<td>87,179,408</td>
<td>2,037,409</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>20,763,248</td>
<td>1,200,791,637</td>
<td>32,442,043</td>
</tr>
</tbody>
</table>

Table 1: Forest Resources Of Turkey, General Directorate of Turkish Forests, 2001; 2) VIII. th. 5 years Development Planning Special Forestry Commission Report, 2001.

In 1956, the present Forest Law numbered 6831 was enacted and modified many times since then. It defines the principles of forest land use and types of ownership and quality: Forests are defined as State Forests, Forests belonging to the public legal entities and Private forests according to the criteria of ownership (Figure2) (DPT 2001). On the other hand according to the criteria of quality forests are classified as Protected forests, Natural forests and Production forests.

Turkish Forest Law is composed of 7 chapters. Contents of this chapters are;
- Chapter I pages 1-6: Definition, classification, administration and inspection of forest
- Chapter II pages 7-44: State forests
- Chapter III pages 45-49: Forests belong to the Public legal entities
- Chapter IV pages 50-56: Private forests
- Chapter V pages 57-114: Common rules
- Chapter VI pages 115-117: Miscellaneous provisions
- Chapter VII pages 118-119: Temporary provisions

In Republic of Turkey, all affairs concerning State Forests or the places regarded as State Forests shall be handled or organised by the General Directorate of Forestry. All forests owned by parties other than the State are subject to the inspection of the General Directorate of Forestry in accordance with the provisions of this Law (Aras 2002).

Turkey as a EUROPEAN UNION Membership Candidate

Turkey is the only pluralist secular democracy in the Moslem world and has always attached great importance to developing its relations with other European countries. Historically, Turkish culture has had a profound impact over much of Eastern and Southern Europe (www.euturkey.org.tr).

Having thus entered into very close co-operation with Western Europe in the political field, it was therefore only natural for Turkey to complete this in the economic area. Thus,
Turkey chose to begin close cooperation with the fledgling EEC in 1959. In July 1959, shortly after the creation of the European Economic Community in 1958, Turkey made its first application to join. The EEC's response to Turkey's application in 1959 was to suggest the establishment of an association until Turkey's circumstances permitted its accession. The ensuing negotiations resulted in the signature of the Agreement Creating An Association Between The Republic of Turkey and the European Economic Community (the "Ankara Agreement") on 12 September 1963 (www.euturkey.org.tr).

Today; Turkey and the European Union (EU) work towards opening of accession talks in early 2005 in line with the conclusions of the 2002 EU Copenhagen Summit. In this regard, both sides have tasks to fulfil (www.mfa.gov.tr)

EUROPEAN UNION forest legislation in force

The outline of forest legislation of European Union points out four major concerns. These four major concerns are the protection of forests against atmospheric pollution, the protection of forests against fires, monitoring of forests and environmental interactions and marketing of forest reproductive material. As a candidate to EU membership, Turkish Forest Legislation should also be in line with this outline. A brief list of the Regulations and Council Decisions that describe the outline of the EU Forest Legislation are given below (http://europa.eu.int) 32003R2152 Regulation (EC) No 2152/2003 of the European Parliament and of the Council of 17 November 2003 concerning monitoring of forests and environmental interactions in the Community (Forest Focus)

- **31999R2278** Commission regulation (EC) No 2278/1999 of 21 October 1999 laying down certain detailed rules for the application of council Regulation (EEC) No 3528/86 on the protection of the Community’s forests against atmospheric pollution
- **31999R1727** Commission regulation (EC) No 1727/1999 of 28 July 1999 laying down certain detailed rules for the application of Council Regulation (EEC) No 2158/92 on protection of the Community’s forest against fire
- **31996D0653** 96/653/EC: Commission decision of 11 November 1996 authorizing Member States to permit temporarily the marketing of forest reproductive material not satisfying the requirements of Council Directives 66/404/EEC and 71/161EEC
- **31994R1091 Consolidated/Disclaimer** Commission Regulation (EC) No 1091/94 of 29 April 1994 laying down certain detailed rules for the implementation of Council Regulation (EEC) No 3528/86 on the protection of the community’s forests against atmospheric pollution
- **31994R0804** Commission Regulation (EC) No 804/94 of 11 April laying down certain detailed rules for the applications of Council Regulation /EEC) No 2158/92 as regards forest-fire information systems
- **31989D0367** 89/367/EEC: Council Decision of 29 May 1989 setting up a Standing Forestry Committee
- **31987R1696** Commission Regulation (EEC) No 1696/87 of June 1987 laying down certain detailed rules for the implementation of Council Regulation (EEC) No 3528/86 on the protection of the community’s forests against atmospheric pollution (inventories, network, reports)

Status of Turkish forest legislation in comparison to the outline of European union forest legislation

In accordance to being a candidate to EU membership, Turkey is evaluating and working on the harmonisation of Turkish Forest and Environmental Legislation to EU
Legislation. This is carried out by a Sub-Working Group of Forestry under the Sub-Committee of Agriculture and Fishing. All the activities of harmonisation and adaptation are carried under the responsibility of Ministry of Forest and Environment. With respect to the outline given in Section 3, a very brief status of Turkish Legislation is evaluated in the following paragraphs.

**Atmospheric Pollution**

Article 26 of the 1937 dated 3116 numbered Forest Law, that is no more in force, states that it is compulsory for the establishments or factories that are near the forests to deal with their gas emissions that may harm the forests in accordance to scientific facts. The owners of the establishments or factories are engaged to take these necessary and compulsory precautions. Establishments or factories that act against article 26 and pollute the air and harm the forests are to be shut down and the owners are to be subjected to heavy fine. It is interesting to see such a modern provision in the Forest Law of 1937. However, it is not possible to see the same mentality in the 1956 dated 6831 numbered Forest Law that is still in power.

Actually, in the present Forest Legislation, there is no specific provision to protect forests from atmospheric pollution. However Environmental Legislation deals with this matter in detail in general means of atmospheric pollution.

There are provisions about air pollution and the prevention of air pollution in the 2872 numbered Environment Act. While the aim of the Act is stated, protection and improvement of environment, proper usage of natural resources and the prevention of air, soil and water pollution is also underlined. It is also denoted that the environment is the property of all the citizens.

In the second article and section c of the Environment Act, environmental pollution is defined as undesired results on the air, water and soil due to human activities.

In the 1983 dated, 2918 numbered Traffic Act, there is a provision related to air pollution. Article 30 of the Act declares that using a vehicle that emits dust and smoke disturbing the environment is a crime and is subject to fine. Turkish Standardisation Institute (TSE) has prepared the norm TS 4236 in May 1984 after a research of two years standardising the limits of exhaust gas emission from road vehicles (Gürpınar 1995).

Heating is also one of the sources of air pollution. Wide usage of natural gas for heating decreased the rate of air pollution drastically. In 1987, the 3378 numbered The Authorisation Act to Change Other Necessary Acts for the Use of Natural Gas is enacted. Protection environment is stated in the aim of the Act.

The Protection of Air Quality Regulation published in 02.11.1986 dated and 19269 numbered Official Gazette prepared in accordance to 2872 numbered Environment Act is an important regulation for the prevention of air pollution. The purpose of this regulation is to take under control all kinds of emissions like dust, mist, vapour, gas, smoke, aerosol created by any kind of activity and to protect humans and the environment from dangers that may result due to air pollution.

1998 dated and 2690 numbered The Act About The Foundation of Turkish Nuclear Energy Association has provisions to protect the environment from nuclear fuels and other nuclear materials.

With respect to above mentioned Legislation, it can be accepted that present regulations of Turkish Legislation on the atmosphere is satisfactory. However not being the subject of Forest Legislation and dealing specifically with the atmosphere of forests, present legislation tries to protect overall air quality with general provisions.

What is more, Turkey is a part of international agreements and protocols. These are:

- Agreement for Long Range Prevention of Air Pollution Beyond the Borders
- Vienna Agreement on the Prevention of Ozone Layer
- Montreal Protocol 1990 on the Materials that Thin the Ozone Layer
- Kyoto Protocol
As in the main agreement, the protocol has two additional lists of Annex-A and Annex-B. Annex-A gives the list of six basic gases of which their emissions should be decreased as these gases cause the greenhouse effect. This Annex also lists the industrial sectors in which these gases are used. In Annex-B, target figures for countries that are present in Annex-1 of the main agreement to decrease the emission of gases that cause greenhouse effect. Although Turkey is present in Annex-1 of the main agreement, not being a party to the protocol, Turkey is not present in the Appendix-B of the protocol and hence does not have a quantitative engagement to decrease the emission of gases causing greenhouse effect. Turkey is not totally a part of this protocol yet (Ulueren.2002).

**Forest Fires**

Turkey is under the effect of Mediterranean climate, hence Turkey is one of the countries under the high risk of forest fires. Turkish forests encounter many fires every year; the annual average of last 10 years is 13,000,000 hectares (Table 2) ([www.ogm.gov.tr](http://www.ogm.gov.tr)).

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Fires</th>
<th>Fires On Purpose</th>
<th>Accidental Fires</th>
<th>Natural Fires</th>
<th>Unknown</th>
<th>Burnt Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>1481</td>
<td>323</td>
<td>449</td>
<td>35</td>
<td>674</td>
<td>8081</td>
</tr>
<tr>
<td>1992</td>
<td>2117</td>
<td>280</td>
<td>561</td>
<td>56</td>
<td>1220</td>
<td>12232</td>
</tr>
<tr>
<td>1993</td>
<td>2545</td>
<td>334</td>
<td>934</td>
<td>40</td>
<td>1237</td>
<td>15393</td>
</tr>
<tr>
<td>1994</td>
<td>3239</td>
<td>289</td>
<td>887</td>
<td>135</td>
<td>1928</td>
<td>38128</td>
</tr>
<tr>
<td>1995</td>
<td>1770</td>
<td>270</td>
<td>577</td>
<td>129</td>
<td>794</td>
<td>7676</td>
</tr>
<tr>
<td>1996</td>
<td>1645</td>
<td>204</td>
<td>698</td>
<td>56</td>
<td>687</td>
<td>14922</td>
</tr>
<tr>
<td>1997</td>
<td>1339</td>
<td>193</td>
<td>696</td>
<td>78</td>
<td>372</td>
<td>6316</td>
</tr>
<tr>
<td>1998</td>
<td>1932</td>
<td>249</td>
<td>1163</td>
<td>53</td>
<td>467</td>
<td>6764</td>
</tr>
<tr>
<td>1999</td>
<td>2075</td>
<td>279</td>
<td>1151</td>
<td>203</td>
<td>442</td>
<td>5804</td>
</tr>
<tr>
<td>2000</td>
<td>2353</td>
<td>410</td>
<td>1380</td>
<td>132</td>
<td>427</td>
<td>26353</td>
</tr>
<tr>
<td>2001</td>
<td>2631</td>
<td>251</td>
<td>1629</td>
<td>188</td>
<td>563</td>
<td>7394</td>
</tr>
<tr>
<td>2002</td>
<td>1469</td>
<td>190</td>
<td>745</td>
<td>179</td>
<td>277</td>
<td>7189</td>
</tr>
</tbody>
</table>

*Table 2: Forest Fires [www.ogm.gov.tr](http://www.ogm.gov.tr)*

In 1995, with the 4114 numbered Act, crimes related to forest fires were deleted from the Turkish Criminal Act and were added to the Articles 76 and 110 of the 6831 numbered Forest Law. Article 76 gives the necessary precautions and Article 110 states the penalties.

The precautions of Article 76 of the 6831 numbered Forest Law are given below.

- To camp in areas other than the determined regions of General Directorate of Forestry.
- To fire barbecues in areas other than the determined regions of General Directorate of Forestry or to leave a barbecue without extinguishing.
- To leave or throw cigarettes or other material that may cause fires.
- To fire stubble within 4 kms range of forests.

Article 110 classifies the crimes of forest fires in 4 categories. The first and the lightest is not to obey the precautions of Article 76 given above. It is given under the heading of "Not Obeying The Precautions for The Prevention of Forest Fires". The second crime of forest fires is defined as "To Cause Forest Fire Accidentally". This is regulated in Section 2 and 3 of the Article 110 and states an imprisonment of 2-5 years and also certain amount of fine for the ones who cause forest fires due to accidents or negligence. If forest fire causes the death of a person, or the damage is big the punishments are increased. In certain cases, the Court may additionally punish according to the Article 526 of the Turkish Criminal Act, that is not to obey the orders of the authorised government personnel and according to the Article 566 of the
Turkish Criminal Act, that is to endanger the society. Third crime is classified as "To Fire Forest On Purpose" and is regulated in Section 4 of Article 110 of Forest Law. The ones who fire forest on purpose are sentenced to imprisonment for 10-15 years and severe fines. If the damaged area is greater than 3 hectares, the penalties are doubled. If the fire endangers the life of a human, the penalties are doubled. If the fire causes death, the guilty ones are sentenced to life time imprisonment. The final classification is "To Fire Forest for Terrorism" and is regulated in Section 5 and 6 of Article 110. The ones who fire a State Forest with the purpose of terrorism are sentenced to 24-30 years of imprisonment and sever fines. If the damaged area is greater than 3 hectares, the penalties are doubled. If the fire endangers the life of a human or the damaged area is greater than 1 hectare the guilty ones are sentenced to life time imprisonment. If the fire causes death, the guilty ones are sentenced to death. However, in line with the harmonisation and adaptation of Turkish Legislation and EU Legislation, death sentences are not executed since 1984 (Ayanoglu-Günes 2003).

Marketing of Forest Materials

Besides its natural, environmental, social, cultural, historical and recreational value, forests and forest products are also subject to trade and also have economical value. Standardisation of not only the nomenclature and products but also the principles of this trade is also crucial to protect the forests from over use and abuse and to have a sustainable usage of this natural source.

Unfortunately, it is not possible to find satisfactory standardisation or provisions for marketing Forest Materials within the Forest Legislation. Articles 26 to 44 of 1956 dated 6831 numbered Forest Law states that production and the harvest in forests can only be done by the State itself in State Forests and only in compliance to management plans. This aims to protect forests from over harvesting (Aygen 2000).

Whenever there exists no specific provision for certain topic regarding the marketing forest materials, provisions of 1956 dated 6762 numbered Turkish Commercial Law are valid.

Some indirect provisions and regulations like the details of the trade like how to stamp and identify harvested trees and how to transport, etc., are regulated by a series of bye-laws such as:

- Bye-Law About The Official Certificates To Be Given To The Forest Products published in the Official Gazette on 12.08.1986,
- Bye-Law About The Production of Forest Material published in the Official Gazette on 24.09.1986,
- Bye-Law On Stamping published in the Official Gazette on 13.08.1984 (Mestav 2001)

Monitoring of Forests and Environmental Interactions

The European Community addresses two of the causes adversely affecting forest ecosystem conditions as atmospheric pollution and forest fires and these were handled with EEC No. 3526/86 and No. 2158/92, respectively. However, both regulations expired on 31 December 2002 and a more comprehensive scheme, called Forest Focus, is prepared including monitoring and information sharing for the prevention of the two major adverse effects. Forest Focus also includes monitoring factors such as biodiversity, climate changes, etc., for a comprehensive understanding between forest and the environment. This new approach, expiring EEC 3528/86 and 2158/92, has pronounced itself in the EC No. 2152/2003 and is in force since 1 January 2003. Besides having all the properties of the previous expired Regulations and also having additional points of monitoring air pollution, forest fires, and causes and effects of forest fires, it also consists monitoring of all other variables of concern of the Forest Focus ranging from carbon sequestration to biodiversity. The evaluation of the efficiency of the monitoring system is also a part of the new system. However, the most
significant section is the Article 3, giving the definitions of forest, other wooded land, other land and forest fire.

Turkish Legislation differs from the European Legislation just in the basics of the definition of a forest. Although there exist certain Provisions as stated in the sections 4.1 to 4.3 of this article for the atmospheric pollution, forest fire prevention and marketing of forest products, the topic of monitoring is present in The Act About The Organisation and Duties of The Ministry of Environment Forest. Section F, Article 2 of the 1 May 2003 dated, 4856 numbered The Act About The Organisation and Duties of The Ministry of Environment Forest (MoEF), states that it is under the responsibility of the MoEF to monitor the topics about pollution and to monitor and find out areas under the risk of pollution. However, the topic of evaluation of the efficiency of the monitoring system is missing and the monitoring is not comprehensive. Hence, this is still a topic to be handled by the Sub-Working Group of Forestry under the Sub-Committee of Agriculture and Fishing for the adaptation and harmonisation.

Conclusion

European Union Forest Legislation is one of the world's most comprehensive and state of the art forest legislation. While broadens the definition of forests, it includes interactions between other factors of environment and forest. Certain precautions for the prevention of hazards like forest fire and atmospheric pollution are present. Besides, being an important part of the environment and the ecosystem, it is underlined that all topics such as biodiversity, soil and water pollution, climate and many other issues are also subjects of the forest.

Turkish Legislation on the other hand spends great effort and care on the environment. There are numerous Laws, Regulations and Bye-Laws dealing with the atmospheric pollution, forest fires, prevention of forest fires and marketing of forest products. Although certain basic definitions differ from EU Legislation, general outline of the Turkish Legislation and EU Legislation are more or less cover the same topics and share the same values of environment. Being one of the most comprehensive and developed subject of EU Legislation, monitoring and the Forest Focus should also be included in the Turkish Forest Legislation by the Sub-Working Group of Forestry under the Sub-Committee of Agriculture and Fishing as soon as possible.

As a general look, as said in the above paragraph, there are numerous Laws, Regulations and Bye-Laws dealing with the same problem of forest and environment. As is presented in many articles of the authors, it can be suggested that all relevant matters of forest and environment to be gathered in a single and comprehensive Forest and Environment Law during the studies of harmonisation and adaptation.

References:
4. www.euturkey.org.tr
5. www.mfa.gov.tr
9. www.ogm.gov.tr
THE IMPACT OF FORESTRY IN EUROPEAN UNION ENLARGEMENT PROGRAMS TO CEEC

BY MATHIEU BRIOUDES

Council of Copenhagen

The first of May 2004, ten Central and Eastern European Countries integrated EU. The pre-accession time which preceded this CEEC integration was destined to fulfil accession criterions imposed by EU. The European Organisation assisted them creating pre-accession financial programs. Our intention was to discover if forest and forestry could have benefited of this financial help and in which proportions.

It was logical to start this study by the beginning: birth of this pre-accession period. This has happened in Copenhagen Council in 1993. This one stands out the first accession negotiations with CEEC. The Twelve Heads of state decided to transform the old assistance program PHARE, devoted to CEEC in the 80’s to help them in political transition, in principal pre-accession financial instruments.

Agenda 2000

In 1997, a very important document was published by the European Commission. Its name is Agenda 2000. Its purpose is to indicate what will be the financial priorities of European Union from 2000 to 2006. Inside these priorities, the enlargement to CEEC takes a major place. The text planned to create, in a new pre-accession phases, two new instruments in fields where PHARE is too limited.

The first one is SAPARD. As you can observe, SAPARD is consecrated to Agriculture and Rural Development. We will see it after the second financial instrument created by Agenda 2000.

Its name is ISPA: its competences are especially concentrated on the two following domains: Transport and Environment. We are more interested in this last field because in the comminatory legislation, forests are often perceived as natural entities to preserve against fire (EC n° 2158/92) or atmospheric pollution (EC n° 3528/86). ISPA could therefore integrate this idea of forest preservation. It’s useful to stare at it by detailing environment sector of ISPA.

ISPA Table

The report is easy to do. As you can observe it on this following table, the only line in the Environment sector of ISPA which could be attributed to forests and forestry is the one called « Air Pollution ». But CEEC doesn't seem to be interested in this subject: as there no projects, therefore forest have no budget in ISPA.

Table 1: ISPA Budget 2000 – Environmental sector details

<table>
<thead>
<tr>
<th>Environment sector</th>
<th>ISPA Budget (in €)</th>
<th>% ISPA Budget/sector</th>
<th>Project number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water</td>
<td>27 535 927</td>
<td>5.98</td>
<td>3</td>
</tr>
<tr>
<td>Used and drinking water</td>
<td>42 568 260</td>
<td>9.24</td>
<td>4</td>
</tr>
<tr>
<td>Used water treating</td>
<td>296 696 243</td>
<td>64.38</td>
<td>24</td>
</tr>
<tr>
<td>Scrap management</td>
<td>94 020 967</td>
<td>20.40</td>
<td>8</td>
</tr>
<tr>
<td>Air pollution</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Budget</td>
<td>460 821 397</td>
<td>46.20</td>
<td>39</td>
</tr>
</tbody>
</table>

(Source: Annual report ISPA 2000)
Perhaps results will be better with the second financial pre accession instrument: SAPARD.

**FIELDS OF SAPARD**

The question we have to ask ourselves is to know if forest can be integrated in both domains of SAPARD.

As we saw it, the fields of intervention of SAPARD are divided into two main directions. The first one is Agriculture. Comminatory legislation has enlisted forestry measures into agriculture for a long time: the first example I find in my study took place in the 80’s. Forestry is only one part, one sector of Agriculture, even if it was not included in the initial product list of Common Agriculture Policy in Rome Treaty. So we can notice that once again Forestry takes a little part in agricultural section of SAPARD.

The second field of SAPARD is Rural Development. This notion is not very clear: Does Forestry belong to Rural Development? It must be examined.

**FORESTRY AND RURAL DEVELOPMENT**

What is the finality of Rural Development in a few words?

The Regulation (EC) n°1257/99, which rules its mission, gives information about it. This text indicates that the measures taken within the scope of Rural Development are to « promote structural adjustment of regions whose development is lagging behind » and « support the economic and social conversion of areas facing structural difficulties (art. 1). »

Forestry and forest can be considered as a economic, social, cultural good vector and should be included in this rural development notion.

And it is the case in the Chapter VIII called Forestry and in all the articles N° 29, 30, 31, 32.

So we can set out the following syllogism:

- Rural development notion is included in SAPARD
- Forestry is included in Development rural notion
- There is forestry in SAPARD too.

We can check easily that all the measures taken in the regulation EC n°1257/99 are mentioned in SAPARD as the following table resume it.

Pre accession financial instrument forecasts all the measures gathered in 15 actions. All Forest and help measures to forestry are gathered in the action N°14. Now, it’s interesting to define the financial impact in SAPARD. It will be the last point of this synthetic presentation.

**SAPARD FINAL TABLE**

To understand the impact of forestry in SAPARD, it is useful to compare the action n°14 with the SAPARD's other actions in the following table.

Tableau 2: Measures chosen by CEECs in SAPARD national programs and its corresponding percentages.

<table>
<thead>
<tr>
<th>Measures</th>
<th>SK</th>
<th>BG</th>
<th>CZ</th>
<th>EE</th>
<th>HU</th>
<th>LV</th>
<th>LT</th>
<th>PL</th>
<th>RO</th>
<th>SL</th>
<th>Prtage of budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fund Exploitation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>22%</td>
</tr>
<tr>
<td>2. Commercial Process</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>26%</td>
</tr>
<tr>
<td>3. Quality Control</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>1%</td>
</tr>
<tr>
<td>4. Production/Environment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>2%</td>
</tr>
<tr>
<td>5. Diversification</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>11%</td>
</tr>
</tbody>
</table>
First of all, let's take a look at the percentages column. If we compare the 5% of total budget of SAPARD to forestry with the 22% used for Fund exploitation or to the 26% of commercial process, forestry seems to be a SAPARD « under-section ». But the forestry situation is much better than many other ones. For example: water (1%), landed register (0%) or Management (0%).

For information: seven CEEC choose forestry sector. Only Slovenia, Hungary, Czech Republic have not proposed any forestry projects within SAPARD.

Finally, can we add and conclude: CEEC didn’t really take the SAPARD opportunity with only 5% of total SAPARD budget. The table proves that they favoured other priority sectors more important for themselves.

One time again, forestry, in this pre-accession period, have not been really considered or if it is, like an under-sector.
IMPLEMENTATION OF THE EU FORESTRY-RELATED LEGISLATION: CASE STUDY OF NATURE CONSERVATION IN THE SLOVAK REPUBLIC

BY RASTISLAV ŠULEK AND JAROSLAV ŠÁLKA

Abstract

On May 1st, 2004, the Slovak Republic (SR) became the member state of the European Union (EU). In legal practice, it means that from the date of accession, the provisions of the all sources of Community law adopted before accession shall be binding on the SR and shall apply in the SR. The EU forestry-related legislation can be found in so-called secondary legislation especially in the form of regulations and directives. The EU forestry-related legislation deals with the following most important issues: forestry measures in agriculture and structural policy, forestry statistics, protection of the Community forests against fire and air pollution, processing and marketing of forestry products and classification of rough wood, forest reproductive material, conservation of natural habitats, fauna and flora.

The paper analyses adoption of the EU forestry-related legislation by the SR in the area of conservation of natural habitats, fauna and flora so that firstly the status of transposition of the respective EU legal provisions into national legislation is described and then, the difficulties in the process of implementation and enforcement of respective legal provisions are analysed. Finally, the recommendations for policy and law makers are proposed in order to achieve harmonised and successful transposition of the EU legislation on nature conservation into the SR national legislation in the area of conservation of natural habitats, fauna and flora.

Key words: nature conservation, forestry, EU legislation, natural habitats, fauna, flora

Introduction

On May 1st, 2004, the Slovak Republic (SR) became the member state of the European Union (EU). By signing the Treaty of Accession to the EU in Athens in April 2003 and its ratification by the High Contracting Parties, the SR has agreed to become member of the EU and party to the treaties on which the EU is founded as amended or supplemented. In practice, it means that from the date of accession, the provisions of the all sources of Community law adopted before accession shall be binding on the SR and shall apply in the SR.

The EU forestry-related legislation can be found in so-called secondary legislation especially in the form of regulations and directives. There is a significant difference between these two forms of legal provisions. Regulations lay down the same law throughout the EU and apply in full in all member states. They do not have to be transposed into national law but confer rights or impose duties in the same way as national law. The member states and their institutions have to comply with regulations in the same way as with national law. A member state has no power to apply a regulation incompletely or to select only those provisions of which it approves, nor can it set up provisions or practices of domestic law to preclude the mandatory application of a regulation. A directive is binding on the member states as regards the objective to be achieved but leaves it to the national authorities to decide on how the agreed Community objective is to be incorporated into their domestic legal systems. The directive does not supersede the laws of the member states but places the member states under an obligation to adapt their national law in line with Community rules (the national authorities may choose form and methods how to achieve the results and further national legislation is usually required).

As there is no common European forestry policy, the EU forestry-related legislation can be found in different areas of the EU legislation, especially those dealing with forestry measures in agriculture, structural policy, forestry statistics, protection of the Community
forests against fire and air pollution, processing and marketing of forestry products, protective measures against the introduction of harmful organisms of plants, marketing of forest reproductive material, and conservation of fauna and flora (Šulek – Šálka, 2003). Analysing the EU policies on forests as well as the principles of the SR forestry policy, the preservation of the biodiversity of forests under the NATURA 2000 scheme, which should be considered as a basic source of a future Community forestry strategy, is one of the policy issues with great importance in the process of harmonisation of the SR forestry policy and legislation with the EU standards. Due to this fact as well as due to the limited scope, this paper deals with the process of implementation of the EU legislation in the area of nature conservation.

**The EU legislation on nature conservation**

The EU forestry-related legislation in the area of conservation of natural habitats, fauna and flora consists of the two basic legal provisions:


Based on the scientific basis, these directives establish the system of NATURA 2000 network consisting of protected birds territories (they are being declared by the first directive) and protected territories of the European importance (so-called habitat territories – they are being declared by the second directive). The objective of the NATURA 2000 network is to protect and conserve the chosen natural biotopes and endangered fauna and flora species within the European geographic area.

The EU member states are obliged to determine the most suitable territories with the occurrence of chosen plant and animal species and nature habitats and to ensure their statutory protection. The directives do not strictly state the size as well as number of these territories, however, they require keeping or improving the biological diversity of the territory.

The process of legislative transposition of the mentioned directives includes following steps:

1. adoption of basic national legislation enabling to propose the national lists of the territories fulfilling the criteria of the directives,
2. adoption of the national lists of these territories by the member state Government and consecutive adoption of these lists by the European Commission,
3. adoption of national legislation dealing with the management measures ensuring the protection and conservation of these territories.

The process of practical implementation of the mentioned directives includes following steps:

1. determination of areas where the species and biotopes protected in Europe can be found,
2. creation of national lists of the territories fulfilling the criteria of the directives,
3. ensuring of protection and conservation of the territories in accordance with the national legislation of the member states.

**Transposition of the EU legislation on nature conservation into the SR legislation**

The transposition of the Bird Directive as well as the Habitat Directive into the SR legislation started with the adoption of the Act 543/2002 Coll. on Nature and Landscape Conservation. This act forms legal basis for creation of the national list of bird and habitat territories and ensuring their protection and conservation.
The SR Ministry of Environment presented the proposal of national list of protected birds territories in April 2003. It includes 38 territories with total area of 1 236 545 hectares (25.2 % of the SR area) from which more than 55 % is in the territory of present protected areas. With the mentioned proportion, the SR is at the top of the 15 EU member states (Table 1). The Bird Directive does not determine either minimum or maximum area of individual bird territory. In the case of the SR, the minimum area of individual bird territory is 60 hectares, the maximum area is 128 000 hectares, average area is approximately 32 000 hectares. The proposal of national list of protected birds territories contains the name of the proposed territory, its cadastral area, its size and reasons why the territory should be included in the list. The SR Government approved the list in July 2003 and it was submitted to the European Commission in April 2004.

### Protected bird territories in the EU member states

<table>
<thead>
<tr>
<th>Member state</th>
<th>No. of territories</th>
<th>Percentage of the country area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovakia</td>
<td>38</td>
<td>25.2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>79</td>
<td>24.1</td>
</tr>
<tr>
<td>Denmark</td>
<td>111</td>
<td>22.3</td>
</tr>
<tr>
<td>Austria</td>
<td>83</td>
<td>14.4</td>
</tr>
<tr>
<td>Belgium</td>
<td>36</td>
<td>14.1</td>
</tr>
<tr>
<td>Spain</td>
<td>303</td>
<td>12.2</td>
</tr>
<tr>
<td>Portugal</td>
<td>47</td>
<td>9.2</td>
</tr>
<tr>
<td>Finland</td>
<td>451</td>
<td>8.1</td>
</tr>
<tr>
<td>Germany</td>
<td>448</td>
<td>7.6</td>
</tr>
<tr>
<td>Luxemburg</td>
<td>13</td>
<td>6.2</td>
</tr>
<tr>
<td>Sweden</td>
<td>403</td>
<td>5.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>233</td>
<td>5.4</td>
</tr>
<tr>
<td>Italy</td>
<td>342</td>
<td>4.6</td>
</tr>
<tr>
<td>Greece</td>
<td>110</td>
<td>4.1</td>
</tr>
<tr>
<td>Ireland</td>
<td>109</td>
<td>3.2</td>
</tr>
<tr>
<td>France</td>
<td>117</td>
<td>1.6</td>
</tr>
</tbody>
</table>

The Ministry of Environment presented the proposal of national list of protected territories of European importance in November 2003. It includes 382 territories with total area of 574 745 hectares (11.7 % of the SR area) from which more than 86 % is in the territory of present protected areas. With the mentioned proportion, the SR is below the average of the 15 EU member states (Table 2). The Habitat Directive does not determine either minimum or maximum area of individual protected territory of European importance. Majority of these territories in the SR – 87 % – is located on the forest land. The proposal of national list of protected territories of European importance contains the name of the proposed territory, its cadastral area, its size, its level of protection and reasons why the territory should be included in the list. Unlike the proposal of national list of protected birds territories, the proposal of national list of protected territories of European importance has to be negotiated with the owners of the territories. All together, more than 42 000 owners were identified and more than 360 negotiations were carried out. Still, the territories can be included in the national list even without the prior consent of the landowners. The SR Government approved this list in March 2004 and it was submitted to the European Commission in April 2004.
Protected territories of European importance in the EU member states

Table 2

<table>
<thead>
<tr>
<th>Member state</th>
<th>No. of territories</th>
<th>Percentage of the country area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>194</td>
<td>23,8</td>
</tr>
<tr>
<td>Spain</td>
<td>1 276</td>
<td>23,5</td>
</tr>
<tr>
<td>Greece</td>
<td>236</td>
<td>20,9</td>
</tr>
<tr>
<td>Portugal</td>
<td>94</td>
<td>17,9</td>
</tr>
<tr>
<td>Finland</td>
<td>1 671</td>
<td>17,8</td>
</tr>
<tr>
<td>Netherlands</td>
<td>76</td>
<td>17,7</td>
</tr>
<tr>
<td>Ireland</td>
<td>364</td>
<td>14,2</td>
</tr>
<tr>
<td>Italy</td>
<td>2 369</td>
<td>13,7</td>
</tr>
<tr>
<td>Luxemburg</td>
<td>38</td>
<td>13,5</td>
</tr>
<tr>
<td>Sweden</td>
<td>3 420</td>
<td>12,8</td>
</tr>
<tr>
<td><strong>Slovakia</strong></td>
<td><strong>382</strong></td>
<td><strong>11,7</strong></td>
</tr>
<tr>
<td>Austria</td>
<td>160</td>
<td>10,6</td>
</tr>
<tr>
<td>Belgium</td>
<td>270</td>
<td>10,4</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>576</td>
<td>9,9</td>
</tr>
<tr>
<td>Germany</td>
<td>3 535</td>
<td>9,0</td>
</tr>
<tr>
<td>France</td>
<td>1 174</td>
<td>7,4</td>
</tr>
</tbody>
</table>

The process of adoption of the national lists by the European Commission is different when comparing bird territories and habitat territories:

A. The proposed protected birds territories are included in the NATURA 2000 network directly by the European Commission (without any negotiations), however, in some specific cases, based on the scientific ornithology criteria, the European Commission may ask the member state to add particular territory.

B. The proposed protected territories of European importance are subject of negotiation by both parties (the European Commission and the member state) within the period of three years – the European Commission can either choose only some of the proposed territories that will create a part of the NATURA 2000 network or it can ask the member state to complete the list if it is insufficient or even ask the member state to add particular territory not included in the list.

After adoption of the national list of protected birds territories by the SR Government, the SR Ministry of Environment shall adopt individual regulations for each of the bird territory. Before the adoption of the regulations, following tasks have to be done – the exact definition of range of the territory, identification of landowners and negotiation of the proposal with the landowners of the territory, definition of impact of the territory conservation on public finance, inhabitants, economic development and employment and environment. Moreover, together with the proposal of regulations, the Ministry of Environment shall submit the programme of care about protected birds territories (these programmes have to be approved by the SR Government). Both, the proposals of regulations as well as proposals of programmes have to be negotiated with the landowners of the territories. None of the protected birds territories can be declared by the Ministry of Environment regulation without the prior consent of the landowners.

After adoption of the national list of protected territories of European importance by the SR Government, the SR Ministry of Environment shall adopt the regulation providing preliminary conservation of these territories so that their present condition will not decline during the negotiations with the European Commission. The SR Ministry of Environment proposed such regulation in May 2004 and it should be adopted in the near future. When the European
Commission reviews and approves the list, the SR adopts the regulation establishing particular level of protection in all protected territories of European importance within the period of six years.

The specific responsibility of the forestry sector in the implementation of the Bird and Habitat Directives is as follows:
- the provisions on the protection of genetic and species diversity of forests shall be included in the Forest Act,
- the Forest Act already contains provisions on the category of special-purpose forests in the protected areas, moreover, the category of forests serving as genetic bases shall be established,
- the forestry sector shall co-operate with the authorities of nature conservation in preparation and development of the programmes of care about the protected territories within the NATURA 2000 network,
- the Ministry of Agriculture shall elaborate the project of monitoring of forest ecosystems in the areas within the NATURA 2000 network.

Problems in the process of implementation and enforcement

The main problems in the process of implementation and enforcement of the legislation resulting from the process of transposition of the EU legislation on nature conservation into the SR legislation can be found in two interconnected areas – one of them is the viewpoint of the landowners of protected territories, the other is the condition of public finance needed for landowners indemnification. These two issues represent limiting factors of creation of the whole NATURA 2000 network.

The member state has to provide such compensation measures that will enable the conservation of all protected territories included in the national lists. In the case of the SR, it means that the provisions of the Act 543/2002 Coll. on Nature and Landscape Conservation dealing with issues of the indemnification for property detriment due to restriction on the land use in favour of nature conservation have to be observed. Such restrictions can be applied only with the prior consent of the landowners. Then, the certain amount of financial means needed for such indemnification has to be included in the proposal of the state budget for each respective year. Another possibility, except of the state budget, however only in the case of protected territories located on the agricultural land, is the use of financial means from the European Agricultural Guidance and Guarantee Fund (EAGGF). In this case, if the protected territories are located in so-called less favoured areas, the landowners are entitled to ask for compensation payments due to environmental restrictions. However, the total size of less favoured areas cannot exceed 10 % of the member state territory, in other cases the compensation has to be covered by the state budget. Moreover, according to another provision of the Act 543/2002 Coll. on Nature and Landscape Conservation, landowners are entitled to ask for financial contribution for keeping or improving the favourable condition of the protected territories. Consequently, if there is not enough financial means for indemnification of landowners or compensation payments, or, on the other hand, if landowners do not agree with the proposed restrictions in the land use, such situation may lead to the reduction of the area of individual protected territories proposed in the national lists.

Remarks on the mentioned financial problems as well as some other problematic issues in the case of the SR are described in following review:
A. Protected bird territories:
- Compensation for owners of forest land from the state budget was calculated in average at the amount of 950 EUR per hectare per year, total compensation for all landowners at the amount of 6,1 mil. EUR per year (however, for year 2003, there was only amount of 0,25 mil. EUR for compensation allocated in the state budget and for year 2004 only 2,5 mil. EUR).
- Compensation for owners of agriculture land from the EAGGF was calculated at the amount of 14,3 mil. EUR per year.
- Union of Regional Associations of the SR Non-state Forest Owners criticizes the proposed area of protected birds territories – according to the representatives of the Union, the area is not justified enough as only the environmental criteria were taken into account without respecting the economic criteria.
- At the present, protected areas cover more than 23 % of the SR territory, after declaration of all protected birds territories, protected areas will cover more than 34 % of the SR territory.

B. Protected territories of European importance:
- Total compensation for all landowners from the state budget was calculated at the amount of 0,5 mil. EUR per year (without indemnification for property detriment due to restriction on the land use in favour of nature conservation in already existing protected areas – such indemnification is calculated roughly at the level of more than 23 mil. EUR).
- The SR Ministry of Finance suggests that landowners should be given the possibility to exchange their land in protected territories for state-owned land outside such territories.
- According to the SR Ministry of Agriculture, only formal and insufficient negotiations with landowners of protected territories were carried out. In practice, 59 % of landowners of the protected territories took part in the negotiations, from which only 31 % of landowners totally agreed with the proposed list of the protected territories. The main reasons for disagreement were doubts about the ability of the state authorities to provide landowners with the compensation within the network of already protected areas.
- There is a strong negative reaction of the landowners on the proposal of the protected territories due to the fact that up to now (June 2004) there is not one single case of compensation solved and realised although the nature protection requirements in already protected areas restrict or directly ban the proper economic use of land.
- The list has to include at least 20 % of total area of given biotope in the SR (considering so-called priority biotopes, the list has to include 100 % of total area of given biotope in the SR), which is, in some cases, too extensive area.

Conclusion
In order to achieve harmonised and successful transposition of the EU legislation on nature conservation into the SR national legislation in the area of conservation of natural habitats, fauna and flora, the following recommendations for policy and law makers can be proposed:
- it is necessary to provide sufficient financial means for indemnification of landowners of proposed protected territories,
- rather unclear procedure of calculation and reimbursement of the property detriment should be simplified and, moreover, to improve the implementation process, it is necessary to introduce accompanying information tools, as the calculation of the indemnification is too complicated,
- the implementation process in the case of proposed protected territories located on the forest land should be harmonised with the issues of forest certification (Paluš, 2000) as it seems to be source of contradiction between nature conservation and forestry,
- the possible competence conflict between the Ministry of Agriculture, representing the interests of landowners, and Ministry of Environment, representing the interests of nature conservationists, should be eliminated,
- after all, if there are too many complications in the process of declaration of the protected territories, especially due to the complications with the indemnification of the landowners, it may lead to the reduction of the area of individual protected territories proposed in the
national lists, or even some of the territories proposed in the lists might be excluded from this list.

The SR has a long tradition in preservation of biodiversity and nature conservation. However, proposed protected bird territories and protected territories of European importance will considerably extend the present network of protected areas in the SR and will have a significant impact on the state budget. Therefore the interests of nature conservation should be harmonised with economic possibilities of the country.

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4. www.zbierka.sk
CHALLENGES AND OPPORTUNITIES IN THE PRACTICAL IMPLEMENTATION OF THE BIRDS AND HABITATS DIRECTIVE IN SLOVENIAN FORESTS

BY ALEKSANDER GOLOB

Abstract

Natura 2000 and forests is undoubtedly the most challenging issue of the actual forest and forestry policy in Slovenia. Just before Slovenia became the full member of the EU, the Parliament adopted a change of the Nature Conservation Act, which is supposed to be the proper transposition of the Article 6 of the Habitats Directive. At the same time, the Government issued a decree by which it declared Special Protected Areas according to the Birds Directive in total share of 25% of the national territory, as well as the national list of potential Sites of Community Interest at about 32% of the national territory. Taking into account considerable overlapping of both types of sites, Natura 2000 sites potentially (as long as the pSCI sites are approved) represent 35% of the Slovenia territory. There are two thirds of forests within these sites, meaning that half of the forest area in Slovenia falls within the borders of the Natura 2000 sites as declared and proposed by the Government.

As long as the national list of pSCI sites is not approved by the Commission, the country is obliged to implement paragraphs two, three and four of the Article 6 on SPA and pSCI sites. It means that within these sites the actual conservation status of the relevant habitat types and habitats of species is not going to decline and that the proper system of assessment of plans and projects will be in place to prevent any actions, which might endanger the conservation goals of the Natura 2000 sites.

On the Special Areas of Conservation, which should be derived from the pSCI and SCI sites within two years, the favourable conservation status of the relevant habitats and species should be ensured on all sites in several years, using statutory, administrative and contractual measures and management plans, if appropriate. The Decree on Natura 2000 sites, which was passed recently, provides for all measures from the Article 6; however, there is still a tendency within the administration to lean especially on standard nature protection measures and not so much on measures that certain sectors, like forestry, already have in place, what is especially true for Slovenian forest legislation.

It is still not generally accepted that forest management planning system in Slovenia might be the most appropriate instrument for ensuring the favourable conservation status of forests and all their components relevant for Natura 2000. The forest management plans comprise all forests irrespective of ownership and are designed to balance ecological, social and economic functions of forests. The forest management goals set in the Forest development programme of Slovenia as well as in the plans are based on the principles of sustainability, multifunctionality and cognitive close-to-nature approach. The latter is especially underlined in the expression, laid down in the forest law that forest management should strive towards conservation and reestablishment of natural indigenous composition of forest living communities. Building on natural and semi-natural forest structures and mimicking succession processes in forest management is therefore the central characteristic of the plans.

There is therefore no need that the Natura 2000 sites comprising the forest would require a considerable change in forest management planning and consequently in forest management orientation. Nevertheless, the requirements for ensuring the favourable conservation status of various EU important forest habitat types and species living in the forest and forestland should be incorporated in the plans more explicitly. The plans should especially in Natura 2000 forest sites deal more with the preservation and establishment of key habitats for the species concerned and at the same time enable surveillance of their status through time. With such an improvement, the plans would represent a good example of designing an
integrative nature conservation approach, which however should also be implemented in real life where some more financial support for fulfilment of Natura 2000 goals would be needed.

**Introduction**

The most challenging issue of the actual forest and forestry policy in Slovenia have been in recent years undoubtedly requirements for an adequate transposition of the Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and of the Council Directive 79/409/EEC on the conservation of wild birds (the Birds Directive). In comparison to other forest and forestry relevant EU legislation, which deals with more or less classical components of forest policy and demands lesser change or reconsideration of the actual forestry paradigm of a country, require the Habitats and the Birds Directive from the forestry sector to start communicating with all concerned with or interested in the biological diversity of the forests. As a consequence of the directives can namely anybody concerned for natural habitats and species of Community importance, request such a forestry practice or protection of certain parts of forests that relevant natural habitats and species would be permanently preserved. Such a situation is on one hand a challenge for forestry sector, which has become in many countries quite closed and self-sufficient and has as such not being paid much attention by the society. On the other hand, however, might this situation be considered an opportunity for forestry to promote sustainable management and planning approaches that might be interesting also for other sectors. It can also contribute to further development of ecosystem management and create environment for greater participation of the stakeholders and the general public while setting management principles and goals, among which many could only be achieved through proper financial support.

After the political change in 1991, Slovenia established a solid forest legislation that corresponds to a great degree to the international commitments (Golob, Ferlin, 2000). In the accession process to the EU, it has therefore not been necessary to change the existing legislation considerably. Relevant institutions with adequate knowledge and equipment were already in place for the implementation of the regulations on the protection of forests against forest fire and against atmospheric pollution (now Forest Focus regulation). Similarly, the system of regular collection of data and information on forests and forestry has also been operational and corresponding to the requirements of the European Forestry Information and Communication System (EFICS). Somehow unusual for the common way of timber trading in Slovenia was the requirement for transposition of the Council Directive concerning classification of wood in the rough and statistical classification of forestry products, although it did not require much effort. On the other hand, the Council Directive on the marketing of forest reproductive material required adoption of a new law and subsequent decrees and regulations, which was quite demanding, although the existing institutions were used for implementation. Since most of the stands are naturally regenerated, this legislation is not so important for Slovenian forestry and forests, represents, however, a good opportunity for marketing the forest reproductive material on the EU market, particularly of some rare species. The Forest Act of 1993 was amended only slightly in 2002 as a consequence of the EU legislation. One of the important goals of the amendments was to achieve full compliance with funding of forestry measures according to the Rural Development Regulation.

As the result of the agreement between the EU and Slovenia that full transposition of the Habitats and the Birds directive as well as identification of Natura 2000 will be carried out before 1 May 2004, the Parliament just before this date adopted a change of the Nature Conservation Act, which is supposed to be an adequate transposition of the Habitats Directive, particularly Article 6. At the same time, the Government issued a decree by which it declared Special Protected Areas according to the Birds Directive in total share of 25% of the national territory, as well as the national list of potential Sites of Community Interest at about 32% of the national territory. Taking into account considerable overlapping of both types of sites, Natura 2000 sites
potentially (as long as the pSCI sites are approved) represent 35% of Slovenia territory. There are two thirds of forests within these sites, meaning that half of the forest area in Slovenia falls within the borders of the Natura 2000 sites as declared and proposed by the Government.

As long as the national list of pSCI sites is not approved by the European Commission, the country is obliged to implement paragraphs two, three and four of the Article 6 of the Habitats Directive on SPA and pSCI sites. Like Slovenia, all other new Member States, which have already established a suite of sites, are in position to comply with this article as transposed into national legislation. Since Article 6 and its interpretation “plays a crucial role in the management of the sites that make up the Natura 2000 network” (EC, 2000), it is of particular interest for forestry to have an active role in implementation of this article regarding the forests.

Another activity connected with the Habitats and the Birds directive, where forestry could play an important role, is implementation of Article 11 of the Habitats Directive, according to which “Member States shall undertake surveillance of the conservation status of the natural habitats and species referred to in Article 2 with particular regard to priority natural habitat types and priority species”.

**Identification and designation of sites**

The process of identification and designation of sites started quite late in Slovenia, particularly in comparison to the old Member States and it differed considerably between the both directives.

The designation of sites according to the Birds Directive (the Special Protection Areas – SPAs) was very much influenced by Important Bird Areas (IBA), which the Slovenian branch of Birdlife International identified well before the state administration began to start the SPA identification process. The initial proposal started with 24% of the territory comprising approximately half of the forested area, and has been only slightly modified during the identification process. Species for which forests were identified as SPAs were especially *Strix uralensis, Glaucidium passerinum, Aegolius funereus, Picus canus, Dryocopus martius, Dendrocopus medius, Dendrocopus leucotus, Picoides tridactylus, Bonasa bonasia, Tetrao urogallus, Ficedula parva and Ficedula albicollis*. Considerable forest areas were part of SPA sites also because species like *Bubo bubo, Caprimulgus europaeus, Aquila pomarina and Lullula arborea* need variegated landscapes with considerable amount of forests and trees. The forestry sector did not have any role in the identification of SPAs. Many forest engineers, however, are good experts for birds and have been very active in the Slovenian branch of Birdlife International, which proposed the sites.

Much more challenging exercise than identification of SPAs was compiling a list of sites that contain natural habitat types listed in Annex I and host species in Annex II in accordance with criteria specified in Annex III. The process in Slovenia more or less strictly followed the instruction laid down in Article 4 of the Habitats Directive, which stipulates that sites shall be proposed (only) “on the basis of the criteria set out in Annex III and relevant scientific information”. This means that economic considerations have had practically no relevance in proposing the sites.

Although forestry institutions did not participate in the initial stage, when the accession countries were invited to propose habitat types and species specific for their territories, which could be of interest for the whole Community, to be added to the Annexes of the Habitat Directive, Slovenian Forest Service participated in the process of proposing the sites (Box 1). It submitted relevant data from its inventories on forests and proposed forests representing relevant forest habitat types after having obtained relevant instruction from the scientific part of the process. For Slovenia these habitat types were:

- 4070* Bushes with *Pinus mugo* and *Rhododendron hirsutum* (*Mugo-Rhododendretum hirsuti*) – priority type,
Box1: Selecting corresponding forests for pSCI on the bases of forest management classes

A forest management class represents forests of similar potential vegetation with similar structure and development trends, for which it is convenient to set a common management goal according to various forest functions. On the regional level they comprise from some tens to several thousand hectares. Forest management classes and data from compartments were used, respecting the following criteria (order is important):

- concordance of the forest communities with descriptions in the manual
- priority status and representativity
- conservation status – management classes where a non-indigenous species to the site represented more than 30% in the growing stock were excluded
- forests of larger complexes were advantageous
- forests that represent habitats of annex II species were more likely included
- socio-economic factors, such as the existence of a protected area, absence of roads or state ownership were also taken into account, but were never decisive

- 9110 Luzulo-Fagetum beech forests,
- 9180* Tilio-Acerion forests of slopes, screes and ravines – priority type,
- 91D0* Bog woodland – priority type,
- 91E0* Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Pandion, Alnion incanae, Salicion albae) – priority type,
- 91K0 Illyrian Fagus sylvatica forests (Aremonio-Fagion) – Slovenian proposal,
- 91L0 Illyrian oak – hornbeam forests (Erythronio-Carpinion) - Slovenian proposal,
- 91R0 Dinaric dolomite Scots pine forests (Genisto januensis-Pinetum) – Slovenian proposal,
- 9410 Acidophilous Picea forests of the montane to alpine levels (Vaccinio- Piceetea),
- 9540* (Sub-)Mediterranean pine forests with endemic black pines – priority type.

It turned out that habitat type 91F0 Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris), which has also been registered at the initial stage to be present in Slovenia, is not present and preserved to a degree to be put on the list.

The forest habitat types listed above may be classified on one hand into those being very rare and vulnerable and as such already being paid special attention and protection in the forest management planning and forest legislation and on the other hand on those being very common in Slovenia, extending over large areas. Where priority and at the same time minority habitat types have been found, they have all been proposed to be included on the list. Special problem were Tilio-Acerion forests that are scattered among beech forests and for which forest information system cannot provide reliable data.

The most spread habitat type in Slovenia represent Illyrian beech forests, composed of 13 different associations. The forests are generally well preserved and have at the same time considerable economic importance. After having excluded forests that contained more than 30% of tree species, which are naturally not part of the habitat type (e.g. spruce), the Forest Service proposed larger areas of these forests of adequate management classes to be part of Natura 2000 network. The assumption here was that the proposed area would be reduced for those parts of forests, which do not host any species of Community importance. The same principle applied also for Illyrian oak-hornbeam forests.

Another reason for including forests into the proposed sites was the fact that forests are habitat for many species of Community importance found in Slovenia. These are in particular large carnivores (Ursus arctos*, Canis lupus*, Lynx lynx), bats (e.g. Rhinolophus euryale, Barbastella barbastellus, Myotis bechsteini), amphibians (e.g. Bombina variegata, Rana latastei), invertebrates (e.g. Cordulegaster heros, Cerambyx cerdo, Cucujus cinnaberinus, Lucanus cervus, Morimus funereus, Osmothera eremita*, Rosalia alpina*, Rhysodes sulcatus, Stephanopachys substratius, Callimorpha quadripunctaria*, Hypodryas maturna) and plants (e.g. Cypripedium calceolus). The sites for these species were mostly proposed by specialists.
of biological science background. Experts from Slovenian Forest Service proposed sites for large carnivores, which were later agreed among all relevant experts. The rather large extent of the sites for large carnivores as well as for certain other species gives an impression that the experts agreed not to propose smaller sites as could be interpreted from Article 4(1) of the Habitat Directive which reads: “For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction.” The experts apparently agreed that the area itself presents essential factor to the life of large carnivores.

After all these considerations it turned out that today approximately one third of the area of potential Natura 2000 network in Slovenia (SPA and the national list for pSCI together), present forest habitat types as listed above and another third forests as habitats for species of Community importance.

Maintaining favourable conservation status and avoiding the deterioration

As Slovenia designated SPAs and prepared a national list for pSCIs, it is obliged to implement provisions of Article 6(2), 6(3) and 6(4) on all these sites according to Article 4(5) and Article 7 of the Habitats Directive.

Article 6(1) does not apply to the classified pSCIs yet, however, discussions on its implementation are already very vivid and there is a common understanding that we should start to undertake measures in order to maintain favourable conservation status of habitat types and species as early as possible. It is namely clear that especially in forests it is nearly impossible to “avoid deterioration of natural habitats and the habitats of species as well as disturbances of the species for which the areas have been designated” as required in Article 6(2), if none of the conservation measures laid down in Article 6(1) is in place.

It is of utmost importance for forestry in Slovenia to find out and to have acknowledged by the nature conservation authority that the existing instruments for sustainable forest management, as established in the forest law, are in principle adequate to comply with the requirements of Article 6(1) and (2). Even more, it seems that the existing instruments of the forest law exactly follow the conservation measures that the Member States have to take in order to maintain or restore the natural habitat types and species at a favourable conservation status. The challenge for forestry is to use the existing conservation measures in such a way that they will correspond to the ecological requirements of the natural habitat types in Annex I and of the species in Annex II of the Habitats Directive present on each relevant site. This should be done in such a way that the available nature conservation measures from the nature conservation law as well as specific ecological knowledge especially from the biologists side would be added to or integrated into the existing forestry instruments.

According to Article 6(1) conservation measures can have at least two forms: the form of “appropriate statutory, administrative or contractual measures…” and “if need be”, the form of “appropriate management plans”.

Management plans

In its publication Management Natura 2000 Sites, European Commission suggests that Member States can establish management plans, which superimpose themselves on the other categories of measures. This seems to be the best solution for forests, particularly in Slovenia, where forest management plans are made as overall plans for all forests irrespective of ownership. These plans are in principle not made from the perspective of an owner, where economic interest is usually the most important, but from the point of view of the state, which is responsible to balance all forest functions in the sense of sustainable management.
The Forest Service, financed nearly exclusively from the budget, draws up management plans at different levels in such a way that both the top-down and the bottom-up approaches apply. In order to meet the principle of multi-purpose forest management, every party interested can try to come up with appropriate motion in public hearings of the plans to influence decisions of the plans. At the operational level, the plans are made in cooperation between the range forester and the owner, taking into account of course the guidelines of plans of higher levels.

Forest management plans play the central role in Slovenia not only in implementing the principle of multi-purpose but also the principle of ecosystem or close-to-nature management. The latter builds on cognitive approach, where development of forest ecosystems under the factors of natural disturbances as well as management interventions is carefully monitored through long periods (in some areas plans were regularly made for more than hundred years). Management goals are always set on the bases of recognitions of processes and reactions of the forest ecosystems to various management approaches on specific sites (Golob, Ferlin, 1998). It is believed that the advantages of such an approach are twofold. From the nature conservation perspective, forests remain naturally and semi-naturally structured and biologically diverse. From the economic point of view, however, there is on one hand probably less income due to some lower cutting intensity and quality, but on the other there are also lower expenditures for planting and various forest protection measures, which are in natural forests not needed.

The ministry responsible for nature conservation and for transposition of the Habitats and the Birds Directive into national legislation did not recognise the importance of the existing forest planning system, which was regarded merely as a planning instrument for using natural resources and not also as a special tool for conservation of forests. Only after the concerted action of foresters on the political level the Parliament adopted in April 2004 an amendment of the latest version of the Nature Conservation Act, which stipulates that “conservation of Natura 2000 sites may be achieved also with measures provided in other legislation which could contribute to their conservation, among which are also plans for sustainable management of natural resources”.

Nature Conservation Act otherwise does not provide for a similar tool as are forest management plans. It has been proposed that landscape ecological planning could be introduced for Natura 2000 sites to meet conservation objectives as Finland decided to do (EC, 2003), but this demands further consideration. According to the Nature Conservation Act, management plans are envisaged for protected areas and Natura 2000 sites could be part of these areas. Only a smaller proportion of Natura 2000 sites in Slovenia fall within the existing protected areas, so this planning instrument has a very limited importance. In addition, there is no real tradition in drawing up such plans, particularly not with the content needed to maintain natural habitats and species at favourable conservation status.

**Box 2: Forest management planning in Slovenia**

For all forests on three levels: regional, management unit, operational

Contents of regional and management unit plans:
- classification of forests into management classes based on natural characteristics (well described from 1970 onwards)
- analysis of the status of the forest compared to the last measurement/assessment
- analysis of the past management and other events
- prognosis of the natural development of the forest (learning also from forest nature reserves)
- setting goals (describing structure and function of the forest in defined future)
- setting guidelines (specific actions to be taken, e.g. in favour of conserving a species) and measures (figures on maximum allowable cut and silvicultural activities)

The plans are based on digital ortho photos and permanent sample plots (monitoring) - normally 250 by 250 metres
Box 3: General guidelines implemented in forest management plans for maintaining favourable conservation status of forests

Management guidelines should reflect a general idea of keeping the forest as close to climax structures as possible, taking into account economic and social functions. Typical guidelines are:

- the presence of non-indigenous species in tree species composition should be limited to a certain proportion (in any case not more than 30%)
- natural regeneration (preferable under canopies) should be enabled also through control of the ungulates
- only small to moderate gaps should be used when regenerating forests, mimicking natural disturbances
- relatively large average growing stock should be maintained within the economic feasibility wherever possible (production period normally exceeds 120 years)
- eco-cells or small key habitats of dead trees of different size should be established and maintained at appropriate level
- man-induced forest fire should be prevented

Forest management plans will apparently play a crucial role in maintaining favourable conservation status of the forested part of Natura 2000 sites in Slovenia. In addition to the actual ecosystem forestry orientation of the plans, they will have to include specific guidelines for maintaining favourable conservation status of species with various ecological requirements that the forests host. These specific guidelines will be partly produced by the team of experts of Slovenian Forest Service, who is responsible for planning, and partly by the Slovenian Nature Conservation Institute, whose nature conservation guidelines have to be integrated into any kind of plans in connection with nature according to the Nature Conservation Act.

Box 4: Special guidelines for habitat types

Extreme sites, no use, protection and biodiversity function, measures against fire (small and/or dispersed areas):

- 4070 * Bushes with Pinus mugo and Rhododendron hirsutum
- 91D0 * Bog woodland
- 91R0 Dinaric dolomite Scots pine forests (Genisto januensis-Pinetum)
- 9530 * (Sub-) Mediterranean pine forests with endemic black pines

Very special guidelines needed in relation to the site and possible threats:

- 91E0 * Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)
- 9180 * Tilio-Acerion forests on slopes, screes and ravines
- 9410 Acidophilous Picea forests of the montane to alpine levels (Vaccinio-Piceetea)

General guidelines in the context of ‘close-to-nature’ and ‘multifunctional’ management:

- 9110 Luzulo-Fagetum beech forests
- 91L0 Illyrian Fagus sylvatica forests (Aremonio-Fagion)
- 91K0 Illyrian oak-hornbeam forests (Erytronio-Carpinion)

Box 5: Special guidelines for habitats of the forest species

In general forest dependant species can be classified into species that require forest structures:

- as are required for maintaining favourable conservation status of the forest habitat type in general (close-to-nature forestry) - most of the species, e.g. Rosalia alpina
- closer to primeval forests (K-species) - e.g. Dendrocopos leucotos, Ficedula parva, Rhysodes sulcatus ...
- closer to succession stages (e.g. Bonasa bonasia, Callimorpha quadrupunctaria and other butterflies ...)

Special guidelines for preservation of wetlands (water courses) in the forest (e.g. Rana latastei, Bombina variegata, Cordulegaster heros)

Species that require solitary dead or weakened trees as special key habitats (e.g. Strix uralensis, Aegolius funereus, Dendrocopos medius, Dendrocopos tridactylus, Ficedula albicollis, Osmotherma eremita, Cerambyx cerdo, Cucujus cinaerinus...)

Other special requirements: (e.g. Barbastella barbastellus, Myotis bechsteini, Ursus arctos require vast forest areas, butterflies require special plants and forest edges: Leptidea morsei, Nymphalis vaualbum, Hypodryas maturna, Eriogaster catax, Erannis ankeraria)
Statutory, administrative and contractual measures

Statutory measures have been and still are the most ordinary instrument for achieving nature conservation goals according to Nature Conservation Act. Decree by which SPA sites were designated as well as the sites constituting the national list of pSCI sites can of course be count as a statutory measure. However, the real statutory measure is supposed to be designation of a Natura 2000 site as a protected area according to IUCN categories. There has been a lot of preparatory work accomplished to constitute new parks in Slovenia in recent years with an ultimate goal to reach 30% of the territory. If this programme had been implemented, most of Natura 2000 sites would have found themselves within the parks. However, due to a rather strong opposition of local communities only one landscape park (Gorjičko) was established recently, meaning that protected areas in Slovenia represent altogether 10% of the national territory. There is a question however, how could the rather weak provisions concerning forestry and agriculture as laid down in the landscape park decree, ensure favourable conservation status of relevant habitat types and species on the long run.

The classical statutory measure of the Forest Act is to designate protection forests. Also in Slovenia, it is the duty of the Government to designate “forests which in harsh ecological conditions protect themselves, their land and below lying lands as well as forests where any other ecological function is exceptionally important”. Protection forests in Slovenia are still in the process of designation and are now cared for only with management plans, where they were given highest degree in the forest functions assessment procedure. The Forest Service identified 6% of the forest area to be declared “classical” protection forests and in addition 13,000 hectares of forests to be declared forest reserves. It has been found out that among other types of forests many habitat types of Community importance (4070*, 91E0*, 91D0*, 91R0*) are part of the identified protection forests and are going to be cared for also within forest legislation.

The most important administrative measure concerning Natura 2000 sites are provisions of Article 6(3) and (4), which have been duly transposed into Slovenian Nature Conservation Act. In the act, the ministry responsible for nature conservation (Ministry of Environment, Physical Planning and Energy) is nominated as “the competent national authority which shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned”. There is no praxis yet to be sure which components of the forest management plans will be assessed in this procedure. The fact is that forest management plans are not excluded from the assessment procedure although they are at the same time a crucial instrument for maintaining favourable conservation status. It would be logical to check only those activities of the plans, which would lead to certain projects - like forest road construction or certain interventions, which would mean greater change of forest structure and function. This issue will be clarified soon as the responsible minister plans to issue regulation on methodology of assessment of plans and projects significantly affecting Natura 2000 sites in line with methodological guidance of the Commission (2001). Another administrative measure provided in the Nature Conservation Act, are nature conservation guidelines, which ought to be integrated into the plans. If the Institute concludes that the degree of integration is not sufficient it has a power of competent authority to prevent that a plan would be made valid.

The most important administrative measure according to the Forest Act is the duty of an owner to get permission prior to cutting. The permission is issued by a Forest Service ranger on the basis of operational plan and after trees have been individually selected and marked in the forest, usually in dialogue between the range forester and the owner (Golob, 1997). This instrument is particularly important to preserve trees that represent habitats for endangered species, especially woodpeckers, bats and beetles. It depends on situation, but usually owners, who participate in selection of trees, agree to leave such trees in the forest and not necessarily expect financial compensation for this.
Another forestry administrative measure, which might be overused from the nature conservation perspective, is the possibility of the forestry authority to enforce cutting of trees that are attacked by harmful insects and diseases and might endanger the health of neighbouring forests. Sometimes this instrument is used too quickly causing unnecessary deterioration of habitats.

As far as contractual measures are concerned, they have been used much more under the Forest Act than under the Nature Conservation Act. Besides other measures that are not relevant for Natura 2000, the Forest Act provides co-financing of certain silvicultural measures, forest protection measures and measures benefiting ecological functions of forests, which have been envisaged in the planning process. These measures are treated as incentives for activities, which the owner has to carry out in line with conditions set out in advance. Such a condition might be that an activity could only be carried out in a period when species will not be disturbed or that only certain species adapted to the site could be planted.

Contractual measures have also been used as compensations for the income forgone in cases where previously formed forest reserves were given back to former forest owners in the process of denationalisation. There have been also cases when compensations were paid according to Nature Conservation Act because certain trees in the forest were protected, but this has not been carried out in systematic way. It is rather difficult to set up criteria for compensation payments for trees that should be left in forests as habitats of species.

Monitoring

There are two reasons why monitoring is important in the context of the Habitats Directive. The first one is a consequence of Article 6(2) according to which it has to be monitored (this word is not used) if habitat deterioration or disturbance of species occurred. To know this, one has to compare the area and the conservation status of typical species of the habitat type with the initial status or viability of a species with initial situation on the site. The second reason is the consequence of Article 11, according to which Member States shall apply surveillance (monitoring) of the conservation status of the natural habitats and species not only limited to the Natura 2000 sites, but wherever they appear in the country.

Here again could be of great help the existing monitoring of the forest structure and composition, as integrated into the forest management planning process. It is a combination of a network of permanent sample plots and analysis of ortho-photo images. Parameters followed on sample plots besides the classical items already include the amount of deadwood; however, other relevant parameters could be added.

As far as animal species are concerned, monitoring methods are much more complex and usually demand involving many observers. Monitoring of birds is provided by the ministry responsible for nature conservation and carried out by NGOs and something similar is going to happen with bats. Forest Service has contributed a lot to monitoring of brown bear and could in future provide data for some other species.

References

THE NEW FOREST FOCUS EC 2152/2003 REGULATION AND THE ROMANIAN FORESTRY SECTOR

BY GHEORGHE FLORIAN BORLEA AND DANIEL TURCU

Abstract

Forest monitoring and protection at Community level was co-ordinated and supported, until 2002, through two different sets of regulations: forest fires and protection against atmospheric pollution. A new and integrated scheme concerning the monitoring of forests and environmental interactions in the Community was finally approved in 2003 by the Regulation No 2152/2003. The new scheme will be based on: establishment of a monitoring programme on air pollution effects on forests; establishment of forest fire monitoring; continuous evaluation of the efficiency of monitoring activities in the assessment of forest ecosystem conditions and the further development of monitoring; establishment of new monitoring activities on soils, carbon sequestration, climate change effects and biodiversity and for protective functions of forests. The importance of the scheme for Romania is remarkable: Forest Focus is open to participation to the candidate countries but also regulates the basic definitions of the sector and provide a common base for reporting at EU level being a real and powerful tool for integrating the Romanian forestry sector at EU level.

Key words: European Community, international arrangements, conservation and protection of forests, Romanian forestry sector, forest monitoring, aquis communautaire, law compliance

Introduction

In Romania, as in the whole Europe, forests have historically played an important role in the social and economic development, providing a strategic major source of rural employment and income through wood logging and processing but also through non-timber forest products. Forests cover 6.337 million ha, which represents 26,7% of the total area of Romania (less than the average situation in Europe), decreasing with more than 0,76 million hectares during last century. The restitution process of the forests to the ex-owners is ongoing, and it is estimated that around 30% of the total Romanian forest area will be private at the end of the process. Sixty-seven percent of the forest area is in the mountains (30% of the country), 25% in the hilly regions (37% of the country), and 8% on the plains (33% of the territory). Forest composition is varied: 30,7% conifers, 30,7% beech (pure and mixed stands), 18,2% oak species, 20,4% various hard and soft broad-leaves. Standing volume is about 1.350 million m3/ha and the average growing stock is 217m3/ha. In 2002 there was 0,28 ha of forest per capita. When well managed and protected, forests can satisfy the demands for renewable and environmental friendly materials (wood material and other forest products), contribute to maintaining water reserves, protection against soil erosion, maintenance of acceptable drinking water and surface water quality, provision of habitats for flora and fauna and maintenance of ecosystem biodiversity. Forests high economic and social values have to be preserved. The public increasingly accepts forests as recreational areas of significant social value. In order to fulfil these functions, forests require stability and healthy.

In June 1995, Romania officially submitted its application for EU Membership. The accession negotiations Romania-EU were started up in 1998. The actual accession of Romania is foreseen for January 2007. The key issues and requirements for a Candidate Country in order to obtain the EU Membership is the full adoption (transposition into national legislation, implementation and enforcement) of the Community law or ‘acquis communautaire’. In order to assist the Candidate Countries in this preparation process and to accelerate the accession, the Commission has established a number of pre-accession support instruments. The different forestry themes that are covered by the EU regulations include: production and marketing of
forest reproductive material, forest monitoring and protection, forestry measures to support sustainable rural development, classification of forestry products, the set-up and functioning of forest information and communication services and the operation of an EU Standing Forestry Committee. The EU forestry relevant legislation includes a basic act and implementing regulations. EC Directives are binding for the Member States with respect to the specific results to be achieved. They have to be transposed into the national legal framework, hence leaving a certain margin for manoeuvre as to the form and means of implementation.

Forest monitoring and protection at Community level—previous activities

Until recently, forest monitoring and protection at Community level was co-ordinated and supported through two different sets of regulations: one related to forest fires and another related to protection against atmospheric pollution. Upon expiration of both these sets of regulations at the end of 2002, the Commission recognised the importance of continuing and even further developing the forest monitoring activities that were established through those Regulations. In its Forest Strategy, a document under the Community action frame, the Commission described its future view on the Community Scheme for the Protection of Forests against Atmospheric Pollution. It was stated that the Scheme should further develop to a feasible monitoring system which covers the range of potential impacts such as air pollution, climate change, diseases, pests and other stress factors on forest ecosystems, including aspects of forest biodiversity. In accordance with these considerations, the Commission presented in 2002 a proposal (called Forest Focus) for a new and integrated scheme concerning the monitoring of forests and environmental interactions in the Community. This proposal has further developed to EC regulation No 2152/2003 concerning monitoring of forests and environmental interactions in the Community (Forest Focus), being an integration and an extension of Council Regulation (EEC) No 3528/86 on the protection of the Community’s forests against atmospheric pollution and EEC No 2158/92 on the protection of the Community’s forests against fire. The new Forest Focus Regulation stipulates a new Community “scheme” for broad-based, harmonised and comprehensive long-term monitoring of the condition of forests. In this context, the monitoring needs are very much related to the implementation of internationally agreed activities on the conservation and protection of forests. This holds in particular for the Proposals for Actions and/or Expanded Work programmes for the: Intergovernmental Panel and Forum on Forests (IPF/IFF), Convention on Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC), Convention on Long Range Transboundary Air Pollution (CLRTAP), Ministerial Conferences of Protection of Forest Ecosystems (MCPFE). Considering the requirements of these International Conventions and taking into account the European policies (strategies, resolutions, directives, protocols, etc.) for forest monitoring, it is clear that apart from monitoring the air pollution effects on forests and their ecosystem, there is a need to monitor aspects related to the protective function of forests, biodiversity, carbon sequestration and effects of climate change. With respect to the review, there is a special focus on the monitoring scheme on air pollution effects on forest ecosystems, whereas the recommendations focus specifically on options for biodiversity monitoring instruments.

The Forest Focus future scheme

The Forest Focus explicitly mentions that the new scheme will be built on the achievements of the previous Council Regulations on monitoring the impacts of atmospheric pollution (No 3528/86) and fires (No 2158/92) on forest ecosystems. Harmonised data collection and the provision of policy relevant information at Community level, will enable the evaluation of ongoing Community measures to promote the conservation and sustainable management of forest ecosystems. The Forest Focus future scheme will thereby be based on four pillars:

- establishment of a monitoring programme on air pollution effects on forests;
• establishment of forest fire monitoring;
• continuous evaluation of the efficiency of monitoring activities in the assessment of forest ecosystem conditions and the further development
• establishment of new monitoring activities on soils, carbon sequestration, climate change effects and biodiversity and for protective functions of forests.

The EU financial support is envisaged for eligible costs and scientific advisory group activities. The Forest Focus “scheme” will be implemented through Commission Regulations, which will prescribe general aspects of the monitoring activities, procedures to be followed for reporting and for developing the national programmes. These Commission regulations will also deal with the elaboration of manuals laying down the methods to be used for monitoring of forest ecosystem conditions, the format of the data and rules for data handling. In view of the execution of the scheme, the Member States will each designate a National Focal Centre to ensure efficient and clear communication structures. The data gathered under the scheme will be submitted by these National Focal Centres to the Commission; the environmental data will be made available to the public and especially to experts and research institutes. The Standing Forestry Committee will assist the Commission in co-ordinating, monitoring and developing the scheme.

The Forest Focus EC 2152/2003 Regulation and the Romanian forestry sector

The scheme is important for the Romanian forestry sector because is open to participation as one of the candidate countries of Central and Eastern Europe (CEECs), in accordance with the conditions established in the Europe Agreements, in their additional protocols, and in the decisions of the respective Association Councils. The Romanian forestry sector has already taken various initiatives in relation to the adoption of the ‘acquis communautaire’ and many activities in this context are under implementation without any external financial or technical support until 2003. In the context where the monitoring needs are related to the implementation of internationally agreed activities on the conservation and protection of forests, when performing forest monitoring activities, Romanian forestry sector will benefit from a better integration with international arrangements in the sector: IPF/IFF, CBD, UNFCC, CLRTAP or MCPFE. Forest Focus is also important for Romania because regulates the common base for reporting technical problems stipulating clear definitions for “forest”, “other wooded land”, “forest fire” and others and provide additional financial support for promoting the “conservation and protection of forests for the benefit of sustainable development”. A compliance of the Romanian forest sector with existing and inventory and monitoring systems related to forest at Pan European level, EU 25 level and national level will be also performed within the future Forest Focus activities:

-land use and land cover inventory systems: CORINE land cover data which represents the most homogenous geo-referenced land cover data for Europe (starting 1990 with an update for 2000) and the LUCAS survey’s which main goal is to make early estimates of the main crop areas and to provide statistical information needed for the implementation of indicators to monitor the integration of environmental concerns into the EU Common Agricultural Policy (CAP). The surveys provide the possibility of monitoring and quantifying changes in land cover, land use and landscape structure over time, including the forest category.

-national forest inventories related to forest growth are the primary sources of information on forestry resources in the Union.

-national monitoring systems related to forest health (crown condition, diseases etc): systems developed under EC regulation No 3528/86 on the protection of the Community's forests against atmospheric pollution, in combination with the International Cooperative Programme on Assessment and Monitoring of Air Pollution Effects (ICP forests) on Forests, and EC regulation No 2158/92 on protection of the Community's forests against fire.

-national monitoring systems related to biodiversity aspects, including forests and including biodiversity monitoring activities carried out by civil society organizations, such as the
BirdLife birds index (including Woodland birds index) and the IUCN Red List of Threatened Species.

In conclusion, the effect of the Forest Focus activities in the Romanian forestry sector will be substantial and positive and will also provide opportunities for a better integration and for revealing its potential to contribute to the sustainable development of the European forestry sector in general.

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ADOPTION OF THE ACQUIS COMMUNAUTAIRE REGARDING THE FOREST REPRODUCTIVE MATERIAL IN ROMANIA

IOAN VASILE ABRUDAN, VIOREL MARINESCU, GHEORGHE PÂRNUŢĂ, GHEORGHE IGNEA

Introduction
The basic EC acts regulating the various aspects regarding the forest reproductive material are:

- **Council Directive (EEC) No 105/99** of 22 December 1999 on the marketing of forest reproductive material, with the following implementing regulations:
  - *Commission Regulation (EC) No 1602/02* of 9 September 2002 laying down detailed rules for the application of Council Directive 1999/105/EC as regards the authorisation of a Member State to prohibit the marketing of specified forest reproductive material to the end-user.
  - *Council Decision (EEC) No 399/66* of 14 June 1966 setting up a Standing Committee on seeds and propagating material for Agriculture, Horticulture and Forestry.

- **Council Directive (EEC) No 105/99**, which lays down the requirements and conditions applicable to the production of forest reproductive material for marketing as well as to the marketing itself of this material within the Community.

The main forest-related principles upon which the Directive is based are:
- Forest reproductive material of tree species and artificial hybrids which are important for forestry purposes has to be genetically suitable for its future growing site conditions;
- Forest reproductive material of tree species and artificial hybrids which are important for forestry purposes has to be of high quality;
- The conservation and enhancement of biodiversity of the forests including the genetic diversity of trees is essential to sustainable forest management; and
- Genetically modified forest reproductive material should not be placed on the market unless it is safe for human health and the environment.


- *Regulation No 1597/2002* provides a standardised form for drawing up the national lists of approved basic material for the production of forest reproductive material. Each Member State shall make its national list available on request to the Commission and other Member States in the form of an electronic spreadsheet or database.
- The objective of *Regulation No 1598/2002* is to ensure a proper functioning of the identity control system for forest reproductive material in the case it moves from one Member State to another during the process from collection to delivery to the end user.
user. More specifically, the Regulation establishes a standardised procedure for the exchange of forest reproductive material between Member States whereby the required information is communicated in a timely and efficient manner. The standard ‘Information document for reproductive material moving between Member States’ that has to be used, is presented in Annex.

- Regulation No 1602/2002 concerns the possibility for a Member State to prohibit the marketing of specified forest reproductive material in its territory and sets out the conditions to be met and the procedure to be followed for obtaining the concerned authorisation.
- Regulation No 2301/2002 defines the term ‘small quantities of seed’ for different forest species. If the quantity of marketed seed does not exceed the amounts specified in the annex of this Regulation, it is not required that the supplier’s label or document includes information about the germination percentage nor about the number of germinable seeds as laid down in Directive No 1999/105.

Finally, a Standing Committee on Seeds and Propagating Material for Agriculture, Horticulture and Forestry has been set up through Council Decision No 399/66. The Committee deals with all kinds of issues arising from the various Directives on the marketing of seeds and propagating material. As for the Standing Forestry Committee, all Member States are expected to have a representative in this Committee.

Transposition of the Acquis communautaire regarding the forest reproductive material into the national legislation and the implementation developments

The transposition of Council Directive No 105/1999 into Romanian legislation was performed in the sense that a legislative act was prepared and officially adopted (Governmental Ordinance No. 11/2004). The legislative act is fully in accordance with the stipulations of CD No 105/1999.

Following the approval of the legislative act transposing CD No 105/1999, further implementation procedures, regulations and norms have to be developed, approved and officially adopted as Governmental Decision (1) and Ministerial Orders (8).

Finally, a Standing Committee on Seeds and Propagating Material for Agriculture, Horticulture and Forestry has been set up through Council Decision No 399/66. The Committee deals with all kinds of issues arising from the various Directives on the marketing of seeds and propagating material. As for the Standing Forestry Committee, all Member States are expected to have a representative in this Committee.

The office in charge of the implementation is the Forest Regulations Enforcement Service (FRES) in the Department of Forests (Ministry of Agriculture, Forests and Rural Development and the recently established Directorates for Forest Regime and Hunting.

Practically, this implementation entails:

- The development of a methodology and conditions for accrediting suppliers of forest reproductive material. This would also include the revision of the existing technical norms for nurseries and nursery production. So far, the National Forest Administration (NFA) has been the exclusive supplier in the country.
- The demarcation of regions of provenance, including the preparation of a map showing these demarcations. For this purpose, the existing well-elaborated and documented system of seed collection zones will form the basis. Considering its design and the used zoning criteria, the system of the seed collection zones can easily be adapted and transformed in a system of regions of provenance in accordance with the EU requirements.
- The revision of standards for approval of basic material and for re-inspection of approved basic material at regular intervals.
- The adaptation of the existing National Catalogue of Basic Material to the EU required National Register and List of basic material. All the necessary information is existing,
and the adaptation will mainly require a restructuring of the information, including the electronic database.

- The development of procedures for the functioning of an official control system that will ensure that reproductive material remains identifiable through the entire process from collection to delivery to the end users.
- The adoption of the EU standard procedure for the exchange of forest reproductive material between Member States.
- The development of procedures and an operational system for the required seed testing and assessment of the external quality of other types of reproductive material.
- The development of conditions for Romania under which it could be accepted that forest reproductive material is harvested and used from basic material that is not meeting the minimum requirements for approval.

From the institutional point of view, an officer of the FRES has been assigned the responsibility for the overall implementation of the new regulation and the set-up and organisation of the entire operational system. This also includes the co-ordination and supervision of the official control system that will ensure the enforcement of the implementation. The controlling activities in the field will be taken care of by a team of 8 Forest Inspectors, based in each of the 8 Territorial Directorates.

Selection and development of basic material remains the responsibility of the Forest Research and Management Planning Institute (FRMPI). Seed quality testing is also carried out in FRMPI laboratories. At the moment, three such laboratories are functional. They are attached to the FRMPI Centres of Bucharest, Brasov and Hemeius-Bacau. Considering the expected increase in seed demand due to the development of various national afforestation campaigns and projects as well as the potential for seed exportation, the installation of a fourth laboratory in the west of the country would be a justified investment.

The maintenance of seed stands and collection of seed is done by NFA. It is expected however that over the coming years the activity of seed collection will face an increased involvement of the private sector.

Literature cited:

ADOPTION OF THE “ACQUIS COMMUNITAIRE” REGARDING THE PROTECTION OF FORESTS AGAINST ATMOSPHERIC POLLUTION AND FIRE IN ROMANIA

BY VIOREL MARINESCU AND GHEORGHE PÂRNUȚĂ

Abstract

For the protection of the forests against the atmospheric pollution and the fire, the Romanian legislation is harmonized with the European regulations.

The National System for the monitoring of soil-land use in agriculture as well as soil-forest vegetation in forestry is financed via budgetary funds. These activities are integrated in the framework of the National System for integrated environmental protection, which is coordinated by the Ministry of Environmental Protection and Water Management.

The Forest Research and Management Institute (FRMI) is the National Focal Center for the European Forest Monitoring Program. In this respect, FRMI has the following main responsibilities: the evaluation of the forest soil condition and the health status of forest vegetation; the development of the annual reports regarding forest monitoring; the submission of reports to the national and international authorities (Ministry, ICP Forest, and the European Commission).

The Monitoring System of soil-forest vegetation for forestry is carried out according to the Methodology for Forest Monitoring at the first and the second levels, approved by ministerial order.

The territory of Romania has been fire-risk mapped, according to the criteria specified in the Council regulation No. 2.158/92/EEC. Therefore, Romania is in the group of the countries with low degree of forest-fires risk.

Implementation activities are carried out according with the new E.U. regulations regarding “Forest Focus” Program.

Background information

A minute analysis on adopting the aquis communitare in the Romanian forest sector was achieved by Karla Van Eynde and Fl. Borlea (1).

The protection of the forests against the atmospheric pollution and the protection of the forests from fires were settled at European level, up to 31.12.2002, by two different sets of regulation.

A. For the protection of the forests against the atmospheric pollution were adopted:


- The Commission Norm (ECC) Nr. 1696/87 which details rules for the implementation of the Norm (ECC) Nr. 3528/86, amended during 1989, 1993, 1994, 1995 and 1999. It refers to rules and procedures connected to catalogue and sent data, network first level, the elaboration of the reports concerning the health status of the forests;

- The Commission Norm (EEC) Nr.1091/94 which details certain rules for the implementation of the Norm (ECC) Nr. 3528/86 regarding financial aspects.
The draft – program for the Forest Protection Against Atmospheric Pollution adopted in 1986 is part of ICP Forest Program (International Co-operative Program) on the Evaluation and Monitoring of Air Pollution Effects on Forests) established in 1985.

For the validating and the assessing the collected data at European level, was designated a coordinating institute (Forest Intensive Monitoring Coordinating Institute) which is also functioning as an information centre for the national Focal centers for the member and associated EU states.

B. For the protection of forests from fire were adopted:
- The Council Norm (EEC) Nr. 2158/92 regarding the protection of Community forests from fire, amended during 1997, 2001 and 2002;
- The Commission Norm (EEC) Nr. 804/94 establishes rules of implementing the Norm (EEC) Nr. 2158/92 regarding common informative system regarding forests fires;

At the end of 2002 the Commission suggested a new integrated monitoring and protecting program for forests, called „Forest Focus”, based on previous regulations Nr. 3528/86 and Nr. 2158/92, proposal to be approved within the framework of European Council and Parliament.

Adoption of the forest monitoring system (FMS) in Romania

Romania decided to participate in the ICP Forests and, consequently, established its national Forest Monitoring System (FMS) in accordance with its commitment to Resolution S1 of the Ministerial Conference for Protection of Forests in Europe (Strasbourg-1990).

As for the legal framework related to the establishment and implementation of the FMS, the following legislative documents were developed and adopted:

1. The Ministerial Order (MO) Nr. 96/1990, adopted by Ministry of Waters, Forests and Environmental Protection (MWFEP), concerning the necessary measures for the implementation of the FMS in Romania.
2. The Decision Nr. 82/1991 of the General Director for Forestry /MWFEP, concerning the establishment of a permanent monitoring plots network.
3. The MO (MWFEP) Nr. 249/1994 (unpublished in the Official Journal of Romania but signed by the state Secretary for Forests of MWFEP) laying down the „Regulations regarding the organization and functioning of the Romanian FMS”.

The content of this MO Nr. 249/10.05.1994 includes:
- General objectives: monitoring the effects of the atmospheric pollution and other biotic and non-biotic factors on the forest area in Romania; establishing a database on the variation of forest environment conditions, as basic information for decision-making.
- Specification on the type of measurements or surveys to be conducted at different levels of monitoring:
  - First level – Forest vegetation assessment and soil analysis in plots whose location is determined by two different systematic networks:
    1. one being the national network which follows a 2x2 km (or 2x4) km grid;
    2. second one being the pan-European network which is designed following a 16x16km grid.
  - Second level – Intensive monitoring in a non-systematic network of representative permanent forest plots. The scheme involves soil and forest health monitoring.
The overall responsibility for implementation and enforcement of the FMS lies with the MWFEP. Specific tasks are assigned to the Forest and Ecological Reconstruction Directorate, to National Forest Administration (NFA)- ROMSILVA and to the Forest Research and Management Institute (FRMI)

- **The Forest and Ecological Reconstruction Directorate of MWFEP.** Attributions: finances the functioning of the FMS work; approves the methodology; supervises the implementation; assures the ICP Forests implementation through adequate measures; approves the national forest policy measures for FMS enforcement; and facilitates and surveys the information and data exchange between the FMS and other monitoring systems in Romania in order to obtain an Integrated Monitoring at the National Level

- **NFA- ROMSILVA.** Attributions: takes the necessary measures for the FMS implementation enforcement; organizes annual short-term training courses for the FMS involved personnel; analyses the annual report on the State of the Forest Health and proposes adequate measures; ensures the information and data exchange between the FMS and other monitoring systems in Romania as well as with other interested governmental organizations and NGOs, FRMI, for issuing the annual report, for technical assistance and for the purchase of equipment.

- **FRMI.** Attributions: assures the functioning and development of the FMS; issues the annual research program (research themes, studies, reports, publications, training programs for each level and sub-level of FMS); co-operates with FMS-related institutions (soil, water, air) in order to realize an integrated monitoring; establishes the FRMI teams for FMS implementation; initiates actions for the assessment of the forest vegetation status and for monitoring its evolution based on the observation from the plots of the national network (first level); performs the necessary measurements for the first level in 247 plots; performs the intensive monitoring measurements for the second level in 50 plots.

3. The MO 1652/MWEP/2000 laid down “The Norms and technical instructions for forest protection”. These norms and technical instructions stipulate that the MO 96/1990, MO 249/1994 and the MO 1652/2000 of MWFEP constitute the legal basis for the implementation of FMS in Romania. However, the regulation only includes detailed methodologies for the surveys to be carried out in the national network (4x4km); no references are made to the standard methodologies to be used for the common ICP Forests.

In reality, MO 1652/2000 has never been applied or enforced because of rapid changes of government whereby the next government neglected to adopt the concerned regulation.


The GEO 38/2002, adopted by Law 444/2002, concerns the implementation and financing of soils and agro-chemical studies, the financing of the national monitoring system soil-field for agriculture as well as the financing of the national monitoring system soil-forest vegetation for the forestry sector. Based on this GEO No. 38/2002, a new „Methodology for Soil-Forestry Vegetation monitoring” was elaborated and
approved through MO 244/2002 by Ministry of Agriculture, Food and Forest (MAFF). Further details on the specific contents of these legislative documents are given below.

- The Law 444/2002 stipulates in art. 5 that the implementation of all monitoring activities usually taken care of by the FRMI must be authorized by and on demand of MAFF.
- The GEO 38/2002, amongst other stipulations, takes well account of the existence of the pan-European monitoring scheme and Romania’s participation in this scheme. References are also made to the concerned EU Regulations. Some examples of such references to ICP Forests and/or EU Regulations are:
  - The respective definitions given to the European Forest Monitoring Program (EFMP), the ICP Forests and the concerned EU scheme;
  - The FRMI is designated as a National Focal Centre for the EFMP and is assigned the tasks of organizing and managing the required databases and elaborating annual/or periodical reports on forest health state and on forest soil analysis. The MAFF and The Ministry of Waters and Environmental Protection (MWEP) approve both the report. These reports must be sent „to the proper International Bodies responsible for the data-gathering and analysis for the ICP Forests, and EU Scheme”.
  - Forest vegetation assessments will be performed annually while forest soil analysis will be carried out every 5 years.

GEO 38/2002 also mentions that:
- The forest monitoring activities will be financed with funds from the state Budget, channeled through MAFF.
- The „Methodology for Soil and Forestry Vegetation Monitoring” is described in GEO No. 38/2002 and approved by MO (MAFF) 244/2002.

The methodology stipulates that Soil and Forest Vegetation Monitoring is performed at the first level and at the second level. At the first level, the monitoring includes the observation points determined by the 16x16 km grid (pan-European network) as well as the observation points determined by the 4x4 km grid (national network). For the second level – the intensive monitoring level – the GEO No. 38 mentions that, in accordance with EU requirements, the following measurements should be performed: soil analysis, forest health, foliar analysis, meteorology, atmospheric deposition and biodiversity.

In relation to the Forest vegetation monitoring in the first level plots, the methodological instructions correspond with the ones of ICP Forests (and hence EU). All data and information collected are recorded on standard formats (conform to ICP Forests and EU). Data processing, validation and analysis is performed with the computer program EUROMON.
For the second level plots (13 in number), data processing, validation and analysis is performed with the computer program INTMON.
Additionally, instructions are provided for monitoring in the national 4x4 km network.
In relation to the Forest Soil analysis the GEO:
- Describes the main objectives of soil analysis; being the collection of data and information on soil chemistry and identification of soil properties related to pollution for the first level. The second level measurements aim at forest decline analysis and an understanding of the role of soil factors in forest decline.
• Stipulates that the involved plots must be described in a general way (in accordance with the FAO guide 1990) and also that the soil characteristics must be described (in accordance with the concerned FAO manual).

• Describes the soil sampling method to be used.

The financing of the above described surveys and monitoring activities is assured through the officially approved „Forest Monitoring Program (FMP)” included in the MAFF National Plan for Agriculture, Food and Forestry. This Forest Monitoring Program consists of a number of separate projects, each of them corresponding with a specific type of survey or measurement.

Adoption of UE regulation regarding forest fire in Romania

The legislation concerning forest protection against fire, adopted in Romania, has as basis the following:

- Law 212/1997 for the approval of Government Ordinance (GO) 60/1997 regarding combat against fire (5);
- MO 775/1998 for the approval of general Norms concerning preventing and extinguishing forests fires;
- MO 1023/1999 for the approval of General Internal Orders regarding the prevention and extinguishing forests fires;
- MO 1654/2000 for the approval of Norms regarding the prevention and extinguishing forest fires emitted by the Ministry of Water and Environmental Protection.

The Institute of Forest Research and Management (FRMI) made a comprehensive study in order to classify the Romanian territory as to the extent of fire risk incidence approved by MAFF through Ministerial Order 651/23.12.2002. The methodology and the applied criteria of classification (frequency of fires, the affected areas (ha), the assesses registered, concerning the economic value of the damages, the appearance of fires connected to seasons or months of the year, fire causes, the link with the type of forest and with the ecological region, ….) were achieved in accordance with the provision formulated in EU Norms, clear in this sense. The statistic data used for the study were supplied by NFA and cover, for some areas, a period of 33 years of observations (1968-2000) and 38 years for other areas (1962-2000). The final conclusion of the study made by FRMI showed that the whole territory of Romania can be considered « with low risk of forest fires incidence «.

Areas with high or medium risk of fire incidence not being included, Romania is not required to conceive and subject to analyses a National Protection Program against forest fire or to participate to the common monitoring forest fires system monitoring.

However, the statistics on forest fires in Romania, during the last years, seem to be significantly different from those registered during 1968-2000, period used as basis for the study mentioned above. More precisely, for the period of time 1996-2000, was registered an average of 200-forest fires/year, which represents 50% out of the total number of forest fires registered during the whole period of 1968-2000. Possible causes for these facts are the climate anomalies as well as the diversification of types of owned properties, over agricultural and forestry areas. If this high level of forest fires incidence will be maintained during the following years, is recommended a revised classification existent at the present.

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[Emergency Government Ordinance no. 38/2002 on the implementation and financing of pedological and agrochemical studies and on the financing of the National System of soil+terrain monitoring for agriculture, as well as soil-forest vegetation for forestry (Official Journal of Romania, first section no. 223/03.04.2002)]


4. [Ministerial Order no. 244/2002 approving the Methodology for Soil and Forestry vegetation Monitoring (Official Journal of Romania, first section no. 831/19.11.2002)]

5. [Law no. 212/1997 approving the Government Ordinance no. 60/1997 regarding the Combat against fires (Official Journal of Romania, first section no. 366/18.12.1997)]
STATUS OF THE CZECH FORESTRY LEGISLATION PRIOR TO THE ACCESSION OF THE COUNTRY TO THE EU

BY KAREL VANČURA

Abstract

The paper gives the brief basic information on the last changes in forestry and environmental legislation that have been adopted since the last Symposium of the IUFRO 6.13.00 Research Group held in Židlochovice, Czech Republic in May 2003.

The year 1989 has brought essential changes of socio-economic and political relationships to the Czech Republic. I. a. the renovation of property and use rights of the original owners to immovable and forests was on behind the creation of the new Forest Act valid since January 1, 1996. The act is linked to the rich tradition of forest acts and on forestry on the territories of present Czech Republic, which goes back to the 14th century. A principle of sustainability is included in it already more than 200 years. However, because of some new information gained during the transformation period there was decided already in the end of nineties that there would be a need to reflect new situation and outcomes also by amendments to the forest legislation approximately in 2004 – 2005.

Introduction

Over the last decade, the economy of the Czech Republic has experienced a profound transformation and transition, going from one of central planning to a market-oriented approach. These changes have not only affected political structures, but also there have been economic and social spectrum effects. Today we face a new situation in which there are 145,000, private-sector forest owners. Small owners reassumed their proprietary rights to about 750,000 hectares of forests, but nearly 90 % of these owners possess on average less than 2 hectares of forest land, which is not favourable for forest management. The small owners, as heirs of original ones, usually: i) have no idea on how to manage forest; ii) live in the town far away from their holdings; iii) are already old and become the victims of dishonest, profit-seeking people who offer them providing of services or a purchase of their forest holdings. Small holdings are not usually managed in proper way because of low skills, knowledge and sometimes also zero interest of the owners.

New forestry legislation has had to be adopted and a new system of maintenance and subsidies for private forest owners had to be put in place to promote sustainable forest management. Also, afforestation of marginal agricultural lands is anticipated.

Basis of Czech legislation in brief

Conception of forestry in the Czech Republic proceeds from the so-called Pan-European process initiated by the MCPFE. The idea of sustainable development, as interpreted in Helsinki 1993, includes the principle of sustainable forest management. Another source for the concept analysis is "The Basic Principles of the State Forest Policy", approved in May 1994. The amendment for "the pre-accession period to the EU" was adopted in 2000. Subsequent implementation of state forest policy targets is contained in the annual, state reports on Czech forestry.

Preservation of our forests for the future has become an ethical commitment of the present generation and the principal aim of current forest policy. The fact that forestry is a business activity and a part of an open, market oriented economy must also be recognised. To fulfil this commitment state forest policy must adhere to the following basic principles:

- completion of the restitution process,
- improvement of forest ecosystems,
- conservation and enhancement of forest biodiversity,
development of non-timber functions of the forests,
- better utilisation of timber as a natural, renewable raw material,
- promotion of forestry institutions,
- pursuit of the economic aspects of the forestry policy, and
- utilization of the national forest programme as a resource for carrying out forest policy.

Legal Framework

The Forest Act, in force since 1 January 1996, is the essential law of new legislation that addresses both the political changes after 1989 and the newly established social-economic relationships. Sustainable, sound forestry is mentioned in many documents including the Forest Act, which was prepared as a compromise between property rights versus public goods interests.

The purpose of the new Act is to determine conditions for the preservation, tending and regeneration of forests as part of the national wealth forming an essential part of the environment. All forest functions and support of forest management are taken into account. This act respects the elementary rights of forest landowners, concern of the state for the fulfilment of all forest functions and preservation of forests for future generations. It regulates conservation of forests and forestland, forest practices, general use of forests, forest management planning, sustainable forest management, forestry licensing, and subsidies for forest management and state administration.

The Act on Nature and Landscape Protection characterises forests as a significant element of the landscape. It regulates, i. a. forest management in national parks, protected landscape areas, and nature reserves resulting from specific plans for relevant areas care. The plans and projects of Regional Systems of Ecological Stability are presented. They serve as the underlying documents for forest management plans and forest management programmes.

The most important forest acts

1348 - draft of the Bohemian Code “Maiestas Carolina”
1754 - Emperor’s Laws on Forests of Bohemia and Moravia (1754); Silesia (1756)
1852 - Emperor’s Patent No. 250 of the Imperial Code
1918 - Act No. 82/1918 Coll. on Temporary Protection of Forests
1928 - Act No. 37/1928 Coll. on Protection on Forests by this Time
1960 - Act No. 166/1960 Coll. on Forests and Forest Management
1977 - Act No. 61/1977 Coll. on Forests
1995 - Act on Forests and Amendments to some Acts (the Forest Act)

A sustainable, sound forestry is mentioned in many documents, of course, in the New Forest Act as well. It was prepared as a compromise to such items as: property versus public goods. The purpose of the new Forest Act is to determine conditions for the preservation, tending and regeneration of forests as national wealth forming an irreplaceable part of the environment, to enable the fulfilment of all their functions and to support sustainable forest management. This act is a fundamental rule of new legislation in forestry that respects the elementary rights of forest landowners, concern of the state for the fulfilment of all forest functions and preservation of forests for future generations. Sustainability of all forest benefits is the basic principle of all forest laws until now. The new Forest Act creates a legislative framework for the fulfilment of the major characteristics of process undergoing in Europe that respects the principles of nature friendly forest management, sustainability and maintenance or broadening of biodiversity.

The Forest Management Plans contains only 3 obligatory instructions (- maximal height of fellings /m³/; - minimal share of so called ameliorative and stability improving forest tree
species in reforestation /broadleaved ones/; - minimal area of thinnings in forest stands to 40 years of age). Other instructions are considered as recommendation, nevertheless the forestry legislation is considered as very strict comparing with the legislation of other European countries.

The new legislation is introduced into forestry practice since the January 1st, 1996. The practical implementation is not so easy in so-called transition period and our foresters are facing to further problems. In the process of transformation (not only in forestry) there is still missing the approach reflecting social and economic changes and respecting overall income of forests and importance of forest management and consequently supporting the cross-sectoral view on forests as a irreplaceable part of the environment.

It seemed that in the light of practical experiences the strengthening of Civil Service and state supervision in the post-transition period had been needed. In spite of wails of the stakeholders of legislation a general supervision on forest management, both private and state forests is of importance; to manage forests for general welfare, not in present favour of individual persons or groups. It has something to do with current overall discipline and also with the general lack of political culture.

Accession to the EU
National laws were and are gradually being harmonised with EU legislation and forestry sector representatives repeatedly negotiate with the EC on relevant technical issues.

Since the May 1, 2004 the whole mass of acquis communautaire has become a part of our legislation. Of course, also the Czech forestry passed all necessary negotiations since June 1998 and harmonised what was necessary (and may be more). Fortunately, not everything what covers European Forestry Law and what has some connection on forestry, is important for everyday life. If the forestry acquis are systematically divided into 12 key fields, their practical descent should be found in the field of plant protection, forest reproductive material, and classification of timber in rough (the harmonisation of the last regulation, oldfashionable and not used in timber trade at all, seems to be rather stupid). These three fields are the most connected ones with the four basic “freedoms” – movement of goods, persons, services and capital.

<table>
<thead>
<tr>
<th>Topic / field</th>
<th>Czech legislation</th>
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<tr>
<td>Plant protection</td>
<td>Act No. 147/1996 Coll., on plant protection care; Decree 89/2002 Coll., on protection against invasive plant species; Decree 90/2002 Coll., on provisions of protection of bees, game and fishes in connection with usage of plant protective means; Decree 92/2002 Coll., on expert knowledge in private activities in the field of plant protection.</td>
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<tr>
<td>Reproductive material</td>
<td>Act No. 149/2003 Coll., on marketing of forest reproductive material of timber tree species; Decree 29/2004 Coll., on marketing of forest reproductive material.</td>
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Of course, forests are closely connected also with the areas of nature protection thus e.g. Natura 2000 is also an important point of the legislative changes. There was an amendment of the Act 114/1992 Coll. on Nature and Landscape Protection prepared but not accepted in the Parliament. Unfortunately its preparation was an example of bureaucracy approach: proposal has been prepared without any discussion with public and stakeholders by officers of the Ministry of Environment. Proposed act was more strict and restrictive than EU regulations on “birds” and “habitats”. It only increased the number of Euro-sceptics.

It is necessary to state that the experiences with changes due to the accession to the EU
are currently mostly negative. The only reason of the Czech legislation changes is only the duty to “harmonise” national legislation with *acquies* and there is no expectation of some positive practical results of the changes made. Sometimes it seems that *vice versa* – changes are moving our national legislation backwards: e.g. in the case of forest reproductive material.

Also discussions about new regulation “Forest Focus” were a bit non-understandable. Not only representatives of new EU countries could not understand why is necessary to change everything what is going more or less well nearly 20 years (ICP-Forests) and why there was no intention to collaborate with this monitoring programme in the very beginning. Fortunately the practical reasons (long row of measurements, investigation of trends, saving man-power and money) won at the end and hopefully the methods used and results gained up to date will be acceptable also for Brussels bureaucrats.

**New acts related to forestry**

There were adopted following legislative provisions in the last year:
- Act No. 149/2003 Coll. and respective Decree 29/2004 Coll. dealing with the reproductive material of forest tree species reflects the requirements of the Council Directive 1999/105/EC „on the marketing of forest reproductive material”. In connection with this type of business has to be mentioned still Decree of Ministry of Agriculture 139/2004 Coll. on import and usage of forest reproductive material.
- Another decree of the Ministry of Agriculture 324/2003 Coll. changed the conditions of licences granting in forestry.

Some more instructions were issued concerning allocation of financial contributions via lower organizations of state civil service. Of course, as every year the amendment to the act on state budget was necessary to adopt for covering of obligations ensuing from the Forest Act. Expenditures related to the “public interest” were as follows:

<table>
<thead>
<tr>
<th>Obligations of state (Forest Act) in mill. of CZK (1 EUR = 31.745 CZK as of July 31, 2004)</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ameliorative and stabilisative tree species</td>
<td>11.1</td>
<td>11.1</td>
<td>10.2</td>
</tr>
<tr>
<td>Activities of professional forest managers</td>
<td>109.8</td>
<td>119.4</td>
<td>91.0</td>
</tr>
<tr>
<td>Forest management guidelines preparation</td>
<td>29.6</td>
<td>29.1</td>
<td>29.1</td>
</tr>
<tr>
<td>Soil improvement, drainage and torrent control</td>
<td>124.7</td>
<td>124.3</td>
<td>90.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>275.2</strong></td>
<td><strong>283.9</strong></td>
<td><strong>220.6</strong></td>
</tr>
</tbody>
</table>

**Expected development of forestry legislation**

Firstly - there is a need to complete the restitution process in forestry. Up to date no one government since 1990 decided about forests of church, which is reported from the past as a very good forest manager. The church could complete the spectrum of big, strong forest owners as it concerns about 170 000 ha of forest land. Return of forests to churches, still a political issue, will mean that proper management practices will have to be carried out on about another 6 % of our forests

From the transformation point of view there are more than actual the privatisation questions, however with the state forestland is necessary to proceed very cautiously. State forests are considered as an important element of balance forest management.

As mentioned before there is an intention to amend the Forest Act – the Government also gives this task in its Decision referring the National Forest Programme. There has been held a
seminar on Forestry legislation in February 2004 where the Forestry Department35 introduced the basic ideas related to the forestry legislation improvement. It has been confirmed that Forestry Department prefers the "bottom up" approach (not as the Ministry of Environment – see above): the proposal made by ministry will be offered to the forestry public and forest owners for discussion. The following materials will be used:
- State forestry policy;
- Experiences of forest owners, entrepreneurs in forestry and civil service with the ten years application of current forest act;
- Results of forests inventory;
- Forestry strategy for the EU;
- Forestry legislation of the forestry comparable European countries;
- Expectation of the public.

It is not possible to expect that there will be a joint forestry policy or common forestry law. But there will not be the same starting line in the broader market in forestry business. Preparing the new forestry legislation we have to consider how to support forest owners as they are handicapped by some more strict regulations on national level. Maybe that some differentiated compensations should be the way, how to balance the selling of forest products on non-regulated European market space.

Positive motivation of forest owners and users should be the way how to offer both: broader services and better behavior including sound management of forests.

Points to discussion:
- general usage of forests,
- improvement of legal consciousness of citizens, particularly of forest owners, uses and their employees,
- position of regional plans of forest development from the point of view of their relation to the forest management plans;
- more effective support to the forest plots arrondation,
- stating of professional qualification of forestry officials including Civil Service,
- specification of right, obligations and responsibilities of so-called professional forest managers paid by state,
- proclamation of key localities as protection forests of special purposes (e.g. from the biodiversity point of view) respecting the forest owner requirements re. to losses compensations,
- taking into consideration the increasing environmental and economical importance of timber in connection with proposals for excluding of particular areas from the commercial forests,
- duty of the unified system of record keeping with the aim to diminish the possibility of illegal logging, tax evasion and thefts of the timber,
- new definition of forestry planning (it should integrate the intention of state forestry and environmental policy as well as the process of landscape planning).

Last information:

There were announced following items for preparatory discussion on Forest Act amendment in the last week of July 2004. The aim is to improve law to be more specific and make it simpler, to lower the taxation burden of both individuals and legal entities. Forestry Department requests all those involved to assist in specification of proposed areas or their completion by another ones. Possible comments should be provided not later than August 20, 2004. It is expected that after the discussion the standard procedure will go through in the next year in such way that the amendment of the Forest Act will be approved till the end of 2005. Basic areas which should undergo changes are as follows (as on July 30, 2004):

35 The organizational changes done in the Ministry of Agriculture (including abolition of “forestry branch”) only ten days later postponed the whole process and there are no details on proposals of the new leadership available in the mid of July 2004.
• relation of Forest Act to other legislation, e.g. Act on Railways, Roads, building legislation etc.;
• forestry planning (integration of state forestry and environmental policy intention, landscape planning), including the position of regional plans of forest development;
• forest management plan (minimal forest area of on owner);
• forest land protection, including fees for removing plots from the forest land;
• supporting for forest land arondation;
• forest categorization in relation to improving environmental and economical importance of forests;
• professional qualification of forestry staff;
• specification of right, obligations and responsibilities (particularly of professional forest managers), supervising, sanctions;
• forced forest administration (particularly in connection with the threat to forests through dangerous calamity agents, bark beetles etc.);
• illegal logging, timber thefts, damages of forests; including tax evasion, prevention, sanctions;
• record keeping of offences and other professional or administrative misconducts by state civil service;
• supreme state supervision.

In closing

Also for our country in the time of the creation of real market environment with clear and well defined legal conditions is valid what is said in relation with forestry business, logging etc. in the Asia region: “Making markets freer was good. Making them fairer would be even better.” Fairer and transparent negotiations also in relation with policy making, and consequent legislation measures preparation is considered as very important.

There is also a need to consider development of requests on so called non-commercial forest services (environmental and social). It should be also a question for legislation because currently the great portion of “commercial” forests fulfills also important beneficial services for the public as forests of special categories. It is important also in this forest category to provide for concrete managed non-productive function as services offered by forestry. The forest research already long time ago proved that at least one half of this forest category had the same importance in fulfilling of other beneficial functions except of wood production.

The major challenge is presented by the fact that the Czech Republic has signed protocols and resolutions at several international conferences concerning forests. These commitments confirmed at the governmental level, means that society has accepted responsibility that, in spite of present problems, the indisputable needs of forestry will be met. The National Forestry Programme adopted, which is just worked out for regions, seems to be a good tool for solving of current important tasks. Using it, there will be necessary to consider i. a. the following issues:
- improvement in overall education (from children to MPs) and public relations;
- lack of general public involvement in forestry issues and awareness on forestry as such;
- institutional building and capacity strengthening in spite of existing budget cuts;
- gaps in collaboration between and among those involved with forestry science, research and practice and insufficient communication at various levels;
- responsible and respectable behaviour of all stakeholders including policymakers.

In the international context, we in the Czech Republic must accept the fact that the solutions of many forest-related problems lie outside the forestry sector. Consequently there is the need to stress the cross-sectoral responsibility for our forests and forestry issues. We regard as crucial the necessity of participating in an international convention on forests in the near future. However, such a convention would have the desired effect only if it is based on and
respects other related agreements and conventions approved previously such as Convention on Biological Diversity, Climate Change, and Convention to Combat Desertification. Referring to laws on this level we can state that it is a pity that EU did not accept the Austrian proposal for an amendment to the Constitution for Europe related to the necessity to include forestry as a field of policy.

And last but not the least: it is good to have nice (eventually harmonized) legislation, but more important is the practical implementation of adopted laws and regulations.

References
3. Proceedings of the national seminar “Forestry in the time of EU accession and international forestry activities”; Czech Forestry Society, Praha, 24 June 2004;
4. Report on the State of Forests and Forestry in the Czech Republic as on 31 December 2003;
SUMMARY OF REPLIES TO COUNTRY QUESTIONNAIRES

BY IOAN VASILE ABRUDAN AND ALINA BACILA

The questionnaire has been distributed with the intention to provide an overview on relevant forest law issues and the implementation of EU forest related legislation in the member and accession countries. It is important to specify that the information gathered represents the judgement of the individual respondents. Respondents from 11 countries (Austria, Bosnia and Herzegovina, Czech Republic, Estonia, Hungary, Latvia, Poland, Romania, Serbia and Montenegro, Slovakia and Ukraine) provided general as well as specific information on the forest related legislation, implementation of the *Aquis communautaire* and the main financing programmes for the forestry sector in their respective countries.

Respondents by country:

<table>
<thead>
<tr>
<th>Country</th>
<th>Completed by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bosnia and Herzegovina</td>
<td>Mersudin Avdibegovic</td>
</tr>
<tr>
<td>Ukraine</td>
<td>A.Torosov, V. Romanovsky</td>
</tr>
<tr>
<td>Romania</td>
<td>Laura Bouriaud, Gheorghe Durac</td>
</tr>
<tr>
<td>Poland</td>
<td>Stanislaw Zajac</td>
</tr>
<tr>
<td>Slovakia</td>
<td>Rastislav Sulek</td>
</tr>
<tr>
<td>Estonia</td>
<td>Monika Lublo</td>
</tr>
<tr>
<td>Austria</td>
<td>Peter Herbst</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Karel Vancura</td>
</tr>
<tr>
<td>Hungary</td>
<td>Tamas Szedlak</td>
</tr>
<tr>
<td>Latvia</td>
<td>The Ministry of Agriculture of the Republic Latvia</td>
</tr>
<tr>
<td>Serbia</td>
<td>Dragan Nonic, Mirjana Stanisic, Dusan Jovic</td>
</tr>
</tbody>
</table>

1. General information

Forest coverage

<table>
<thead>
<tr>
<th>Country</th>
<th>Country area (ha)</th>
<th>Area of forest and other wooded land (ha)</th>
<th>Forest coverage (%)</th>
<th>Forest area/capita (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bosnia &amp; Herzegovina</td>
<td>112 900</td>
<td>2 709 769</td>
<td>53</td>
<td>0,74</td>
</tr>
<tr>
<td>Ukraine</td>
<td>60 350 000</td>
<td>10 782 000</td>
<td>15,6</td>
<td>0,2</td>
</tr>
<tr>
<td>Romania</td>
<td>23 839 100</td>
<td>6 605 700</td>
<td>27,7</td>
<td>0,29</td>
</tr>
<tr>
<td>Poland</td>
<td>31 268 500</td>
<td>8 917 800</td>
<td>28,5</td>
<td>0,233</td>
</tr>
<tr>
<td>Slovakia</td>
<td>4 903 500</td>
<td>2 008 349</td>
<td>41</td>
<td>0,37</td>
</tr>
<tr>
<td>Estonia</td>
<td>4 450 000</td>
<td>2 290 000 (without other wooded land)</td>
<td>52,3 (50,5)</td>
<td>1,63 (342 m³ growing stock/capita)</td>
</tr>
<tr>
<td>Austria</td>
<td>8 380 000</td>
<td>3 960 000</td>
<td>47,2</td>
<td>0,5</td>
</tr>
<tr>
<td>Czech Repl.</td>
<td>7 886 600</td>
<td>2 634 000</td>
<td>34,0</td>
<td>0,76</td>
</tr>
<tr>
<td>Hungary</td>
<td>9 303 000</td>
<td>1 811 000</td>
<td>19,4</td>
<td>0,18</td>
</tr>
<tr>
<td>Latvia</td>
<td>6 480 000</td>
<td>2 850 000</td>
<td>45</td>
<td>1,3</td>
</tr>
<tr>
<td>Serbia</td>
<td>8 836 000</td>
<td>2 313 000</td>
<td>26,2</td>
<td>0,25</td>
</tr>
</tbody>
</table>

Forest ownership (%)

<table>
<thead>
<tr>
<th>Country</th>
<th>State</th>
<th>Other public</th>
<th>Communities</th>
<th>Private (individuals)</th>
<th>In the process of restitution (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bosnia &amp; Herzegovina</td>
<td>80,68</td>
<td>0</td>
<td>0</td>
<td>19,32</td>
<td>No information</td>
</tr>
<tr>
<td>Ukraine</td>
<td>98,2</td>
<td>1,7</td>
<td>N/A</td>
<td>0,1</td>
<td>N/A</td>
</tr>
<tr>
<td>Romania</td>
<td>69,8</td>
<td>13</td>
<td>7,8</td>
<td>1,1</td>
<td>-</td>
</tr>
<tr>
<td>Poland</td>
<td>81,7</td>
<td>-</td>
<td>0,9</td>
<td>17,4</td>
<td>-</td>
</tr>
</tbody>
</table>

135
<table>
<thead>
<tr>
<th>Country</th>
<th>Municipal</th>
<th>3.2 Church</th>
<th>2.41</th>
<th>36</th>
<th>25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovakia</td>
<td>42,8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>37</td>
<td>2</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>15,7</td>
<td>3,7</td>
<td></td>
<td>80,6</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>60,7</td>
<td></td>
<td>16,0</td>
<td>23,3</td>
<td>6,0</td>
</tr>
<tr>
<td>Hungary</td>
<td>59</td>
<td></td>
<td>1</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>50,2</td>
<td>7,8</td>
<td></td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Serbia</td>
<td>55,04</td>
<td>0,24</td>
<td>0,93</td>
<td>43,79</td>
<td></td>
</tr>
</tbody>
</table>

### Forest policy/programme

<table>
<thead>
<tr>
<th>Country</th>
<th>Forest Act exists since the year:</th>
<th>Are there any initiatives to change or amend this law?</th>
<th>Is the development of the National Forest Programme?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bosnia &amp; Herzegovina</strong></td>
<td>2002 in the Federation of B&amp;H. 1994 in the Republic of Srpska with amendments from 2002</td>
<td>Yes (in F of B&amp;H)</td>
<td>Not started in sense of MCPFE meaning</td>
</tr>
</tbody>
</table>

1/ *Describe the reasons for proposed changes in brief:*

2/ *Explain in brief the development stage or the reasons:*

- **Initiatives to Change Forest legislation**: The implementation of the Law on Forest in F of B&H is very slow due to specific organisation of forestry sector. Some amendments are proposed to improve this Law and accelerate its own implementation.

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**Ukraine**

- **In the process of development and adoption**: 1994
- **Completed**: Yes
- **In progress**: In progress

1/ *Describe the reasons for proposed changes in brief:*

Adoption of the new Land Code of Ukraine (October 2001). Civil Code (2003) and other laws as well as international commitments of Ukraine concerning forests. All this calls for changes in the existing Forest Code. Revisions to the existing Forest Code are under preparation.

2/ *Explain in brief the development stage or the reasons:*


Basic provisions of this program are as follows:
- Status of forests and their importance;
- Main trends of forestry development;
- Financial and resource provision of the Programme;
- Legal and scientific provisions;
- Expected results;
- Programme management and monitoring;

---

**Romania**

- **In the process of development and adoption**: 1996
- **Completed**: Yes
- **In progress**: In progress

1/ *Describe the reasons for proposed changes in brief:*

2/ *Explain in brief the development stage or the reasons:*

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The recent changes did not affect directly the Forest Act, but the main law implementing the forest act, which was the law of “forest regime”, Law 75/2002 which has been replaced by the Law 120/19.04.2004. Several modifications have been introduced in order to strength the law implementation in public and private forests.

Also, the changes affected the institutional framework. Thus the forest inspectorates which provided until now both extension services and control of law implementation services, have been split in order to separate these functions. The territorial directions for forest regime have been created as representatives of the ministry in the territory. A number of 100 officers have been transferred from the Forest Inspectorates to the new forest directions.

### Poland

<table>
<thead>
<tr>
<th>Year</th>
<th>Adoption</th>
<th>In Force</th>
<th>Forest Act Changes</th>
<th>Development of National Forest Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>1991</td>
<td>1992</td>
<td>Amended several times since 1992. The major amendment was adopted in 1997. It concerned mainly changes in administrative responsibilities for forests, creating forest promotional areas and support for ecological education in forests, financial and organizational support for afforestation of agricultural lands, and changes in rules for preparing management plans for private forests.</td>
<td>Development of the National Forest Programme is in a very advanced progress. The Regional Operational Programs of the National Policy on Forests, which serve as a tool for implementation of rules and regulations of the National Policy on Forests into forestry sector activity within individual regions, are elaborated and accepted. They are drawn up in a short-term- (up to 2012), medium-term- (2013-2025) and long-term time frames (2026-2050). The Programs are a subject for consultations with forestry professionals, representatives of all forestry-related administrative and management structures as well as social-, professional- and branch groups interested in the topic. After their improvement and approval, they will serve as a basis for developing the National Forest Program, which will be supplemented with the issues concerning sustainable forest management and development of the national level. It is planned that the NFP will be finally elaborated, consulted and accepted at the end of 2004 or beginning of 2005.</td>
</tr>
</tbody>
</table>

### Slovakia

<table>
<thead>
<tr>
<th>Year</th>
<th>Adoption</th>
<th>In Force</th>
<th>Development of National Forest Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1977</td>
<td>Yes</td>
<td>not started</td>
</tr>
</tbody>
</table>

1. **Describe the reasons for proposed changes in brief:**
2. **Explain in brief the development stage or the reasons:**

   Forest Act dates back to 1970s so there is a need for a “modern” piece of legislation on forestry. NFP – the Government and Ministry of Agriculture have decided that firstly the new Forest Act has to be approved, then we work out NFP.

### Estonia

<table>
<thead>
<tr>
<th>Year</th>
<th>Adoption</th>
<th>In Force</th>
<th>Development of National Forest Program</th>
</tr>
</thead>
</table>

1. **Describe the reasons for proposed changes in brief:**
2. **Explain in brief the development stage or the reasons:**

   Changes are foreseen partly according to the actions proposed under EFDP:
   - Licensing forest inventory
   - Amendment and rectification of private forestry chapter
Forest Notification was amended to Forest Cutting Licence
Final fellings / Clear cuttings only based on the rotation age
Forest Management Plan were amended again obligatory (from 2005)
Sub-restrictions to shelter wood cutting

**Austria**

| no formal document | 1975 | not really |

1/ Describe the reasons for proposed changes in brief:
2/ Explain in brief the development stage or the reasons:
Within the current political setting, the chances of having a National Forest Programme formulated and implemented seem to be rather modest: Powerful stakeholders with strong political and societal backing will not be prepared to share their sphere of influence with other players representing opposing interests.

**Czech Republic**


1/ Describe the reasons for proposed changes in brief:
2/ Explain in brief the development stage or the reasons:
1/ Discussions on the amendment of Forest Act should start in 2004 according to the previous decisions (1999/2000) and the task given by Government through the National Forest Programme.
2/ National seminar on his issue has been held in February. After the substantial changes in the Forestry Department structure (March 2004) the process was slowed down.
No new information available on the end of July 2004.

**Hungary**

| (1791 first forest act, 1879 first modern forest act 1935 IV. Act on forest 1996 LIV. Act on forests and protection of forests, 1997. Implementation regulation) | The implementation regulation is under continuous adjustment as necessary. For example considering the EU legal harmonisation process. | Started in 2000 with a preparation of a status report, after please see the English site of this: http://www.erdosstrategia.hu/

1/ Describe the reasons for proposed changes in brief:
2/ Explain in brief the development stage or the reasons:
If will be some changes one of the main reason will be the EU enlargement and CAP reform, the new rural development regulation (post 2006) is under preparation in the EU Commission.

**Latvia**

| 1998 | 2000 | Changes: -order about tree cutting outside of forest land, loss recompensation about nature biodiversity reduction, loss calculation and compensation order -forest owner priority to get EU finance true forest management plans |

In progress, till 1 August 2004 development of strategically aims, development of the National Forest Programme till 1 December 2004.
<table>
<thead>
<tr>
<th>What are the main problems/challenges of the forestry sector in your country?</th>
<th>Bosnia &amp; Herzegovina</th>
<th>Ukraine</th>
<th>Romania</th>
<th>Poland</th>
<th>Slovakia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Serbia</strong></td>
<td>1991</td>
<td>Yes</td>
<td>Not started</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/Law change</td>
<td>Current law needs to be update and actualised with modern tendencies and global changes in forestry sector.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/NFP development</td>
<td>NFP process is not started yet, mainly because of not identified national forestry policy and strategy in compulsory way. In Serbia case, possible NFP objectives can be identified as: institutional strengthening; capacity building; forestry extension and public information; research and technology development; educating and training; development of information system; afforestation; SFM; biodiversity conservation and protected area management; wildlife and hunting management; rural development; non-wood forest products utilisation and management; forest fire management; international cooperation, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>What are the main problems/challenges of the forestry sector in your country?</strong></td>
<td><strong>Bosnia &amp; Herzegovina</strong></td>
<td><strong>Ukraine</strong></td>
<td><strong>Romania</strong></td>
<td><strong>Poland</strong></td>
<td><strong>Slovakia</strong></td>
</tr>
<tr>
<td>1. Lack of long-term forest strategy as well as consistent forest policy at the State level</td>
<td>2. Organisational problems in forestry sector heavily connected to the constitutional provisions</td>
<td>3. Low efficiency and productivity in forestry sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ukraine</strong></td>
<td>1. Development of National Forest Policy; Development of legal basis of the Programme;</td>
<td>2. Development of the system of forestry management, reforming of forestry in compliance with the modern socio-economic conditions.</td>
<td>3. Improvement of financing to forestry</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td>1. Secure the property rights and fight against corruption of forest officials</td>
<td>2. Provide extension services and information to private owners</td>
<td>3. Improve economic efficiency of forest management</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td>1. Afforestation of marginal agricultural lands, unsuitable for effective agricultural production</td>
<td>2. Improvement of species structure of forests and forest health conditions</td>
<td>3. Improvement of forest management in private forests and establishing of forest owner associations</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Slovakia</strong></td>
<td>1. Financial support to forestry from public sources</td>
<td>2. Indemnification of forest owners</td>
<td>3. Relations between forestry and wood processing industry</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Estonia

1. **PROBLEM:**
   Tax system, that doesn’t support forest management activities:
   - a) Benefits vs. costs – costs to forestry can’t be accounted from the benefits earned from the forests
   - b) Land tax rate (tax double as for agricultural land and no possibility to get reduction or exemption after reforestation
   - c) Value-added tax – higher if you sell timber

2. **CHALLENGES**
   Supporting private forestry and forest management activities. More financial allocation and direct supports

3. **PROBLEM/CHALLENGE**
   Inventory of Woodland Key Habitats and Natura 2000 – new system and restrictions related to it. Possible support schemes: national or EU supports.

### Austria

1. Low incomes from wood production

2. Multiple functions/interests in forests (tourism, hunting, forest pasture ….)

3. Absentee owners

### Czech Republic

1. Low rentability.

2. Restitution:
   - weak cooperation with / between small forest owners,
   - restrictions of owners are not well compensated,
   - need to decide on forests of church.

3. Restrictions of forest owners are not properly compensated.

1. To improve the interest on problems of forests, which are considered as a cross-sectoral item from the point of view of responsibility. To change the trend of forestry importance diminishing.

2. To overcome gaps in collaboration between those involved in forestry science, research and practice. To improve insufficient communication at various levels.

3. Responsible and respectable behaviour of all stakeholders including policymakers

### Hungary

1. New challenges from environment side: Natura 2000 network, need for more constrains, request for native species in the afforestation

2. Increased biomass demands for energy production, lack of raw material for some wood processing industry (as a consequence of the Kyoto process)

3. Increasing demand for multifunctional usage of forestry under the rural development measures. (Who should pay for the multifunctional forestry in Europe?)
### Latvia

1. Sharp development in forest industry recasting output exceed possible recasting resources as a result big amount small and medium forest enterprises need to found their own niche in market or need to finish existence.

2. Deficient of financing and assistance for education and science, competitive provision in forest sector

3. Insufficient understanding from society about forest sector, their priorities and ongoing processes

### Serbia

1. Development of forest administration, restructuring of public enterprises and decentralisation.

2. NFP process didn’t start jet, but forestry policy defining objectives are in the development phase.

3. Private forests management

### Adoption of the ‘acquis communautaire’ regarding the forestry sector

#### Bosnia & Herzegovina

There are no any transposition of relevant EU legislation and implementing regulations into national legislation related to forest reproductive material, protection of forest against fire and atmospheric pollution, EFICS and statistical classification of forestry products. B&H is among the countries that are at the very beginning of EU integration process. That is why, there are no any forestry measures funded under the EU rural development support scheme.

#### 2.1. Forest reproductive material

<table>
<thead>
<tr>
<th>Outline of relevant EU legislation and implementing regulations</th>
<th>Transposition into national legislation: - status of transposition; - the national legal acts</th>
<th>Implementation and enforcement arrangements: - responsible institutions; - funding arrangements</th>
</tr>
</thead>
</table>

The Forest Code of Ukraine and the following legal acts are in the process of preparation and will take into account relevant EU legislation and implementing regulations in the framework of Ukraine’s international obligations.

**Romania**

Governmental Ordinance nr 11/2004 concerning the production, commercialisation, and utilisation of forest reproductive material, adopted Law to approve the Governmental Ordinance 11/2004 adopted


The State Forestry Committee of Ukraine is responsible.

- the State program entitled ‘Forests of Ukraine for 2002 – 2015 provides such funding. The adoption of new legal acts will call for revision to this funding.

Administrative bodies: MAFRD (Ministry of Agriculture, Forests, and Rural Development) Territorial Directions for Forest Regimes and Hunting

Control of law implementation National Authority for Control Forest Inspectorates

Managers of forest estate National Forest Administration Other structures for managing private forests
end-user.  
(OJ L 242 10.9.2002 p.18-20)


**Commission Regulation (EC) No 1597/02** of 6 September 2002 laying down detailed rules for the application of Council Directive 1999/105/EC as regards the format of national lists of the basic material of forest reproductive material.  
(OJ L 240 7.9.2002 p.34-38)

**Council Decision (EEC) No 399/66** of 14 June 1966 setting up a Standing Committee on seeds and propagating material for Agriculture, Horticulture and Forestry.  
(OJ L 125 11.07.1966 p.2289-2290)

**Poland**

Act of 7th of June 2001 on forest reproductive material  
(Dz.U..2001.73.761)

Minister of Environment Regulation of 14th of April 2003 on the format of the certificate of identity for forest reproductive material  
(Dz.U. 2003.86.803)

Minister of Environment Regulation of 14th of April 2003 on the format of the application for issuing certificates of identity for forest reproductive material  
(Dz.U. 2003.86.802)

Minister of Environment Regulation of 18th of February 2004 on the detailed requirements for forest reproductive material  
(Dz.U. 2004.31.272)

Minister of Environment Regulation of 19th of April 2004 on using forest reproductive material outside it origin area  
(Dz.U. 2004.84.791)

Minister of Environment Regulation of 23th of April 2004 on the way of gathering records on forest reproductive material use  
(Dz.U. 2004.94.929)

Act of 7th June 2001 on forest reproductive material  
(Dz.U..2001.73.761)

Act of 7th June 2001 on forest reproductive material  
(Dz.U..2001.73.761)

Act of 7th June 2001 on forest reproductive material  
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Act of 7th June 2001 on forest reproductive material  
(Dz.U..2001.73.761)

Minister of Environment Regulation of 19th of April 2004 on using forest reproductive material outside it origin area  
(Dz.U. 2004.84.791)

Minister of Environment Regulation of 23th of April 2004 on the way of gathering records on forest reproductive material use  
(Dz.U. 2004.94.929)

**Slovakia**

Act 217/2004 on forest reproductive material  

Ministry Regulation 64/2001 on forest reproductive material, its obtaining and evidence  

- all provisions of Directive 105/99 has been implemented in above mentioned legal acts

**Estonia**

EU legislation has been transposed to Seed and Plant Propagating Material

Minister of Environment  
Office for Forest Seed Production  
National Commission for Forest Seed Production  
National Register for Forest Basic Reproductive Material

- costs of activities carried out by the Office for Forest Seed Production are covered by the State budget
- costs of activities carried out by the National Commission for Forest Seed Production are covered by the State budget

**Implementation** – Ministry of Agriculture  
**Enforcement** – Ministry of

142
<table>
<thead>
<tr>
<th>Country</th>
<th>Law and Legislation</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Czech Republic</strong></td>
<td>Fully implemented by the Act on Marketing of Forest Tree Species Reproductive Material, No. 149/2003 Coll. And respective Decree No. 29/2003 Coll.</td>
<td>Responsible institutions: 1. Ministry of Agriculture and its Authorities 2. Centre of Forest Protection and Silviculture</td>
</tr>
<tr>
<td></td>
<td>Act on GMOs handling No. 78/2004 Coll.</td>
<td>Officially “nominated person” – Forestry and Game Management Research Institute Jiloviste-Strnady. It is responsible also for “National List of the Basic Forest Reproductive Material”.</td>
</tr>
<tr>
<td></td>
<td>Agriculture, Forestry state administration bodies (Regional Forest Office, District Forest Office), Forest Research Institute</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Funding – state budget (national support) – subsidies for management of genetic resources, testing of genetic quality of forest reproductive material, preservation of endangered genetic resources of forest trees</td>
<td>Funding arrangements: Because of the lack of money the control system still has not been created in a proper way.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There was an idea to join the respective “OECD scheme” in 2005.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The National Institute for Agricultural Quality Control (hereinafter: Institute) operating and controlling the system of reproductive material certification</td>
</tr>
<tr>
<td>Country</td>
<td>Details</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Hungary</strong></td>
<td>Fully harmonised, Decree No 91/1997 (XI. 28.) FM of the Minister of Agriculture on forest reproductive materials</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For the purposes of the application of the certification system of reproductive materials the Institute collaborates with the State Forest Service (Állami Erdészeti Szolgálat) and its regional agencies (hereinafter “forestry authority”), educational and scientific institutions of silviculture, in case of species or areas under nature protection with the Ministry of Environmental Protection and Rural Development, and professional and interest safeguarding organisations of forest managers and reproductive material producers, and the Association of Forest Propagation Material Producers</td>
<td></td>
</tr>
<tr>
<td><strong>Latvia</strong></td>
<td>Ministry implement directive with Ministry regulation Nr:648 &quot;Regulation on Forest Reproductive Material&quot;. All regulations accommodated on direct way</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Ministry of Agriculture of the republic of Latvia, State Forest Service, State Plant Protection Service</td>
<td></td>
</tr>
</tbody>
</table>

### 2.2. Protection of forests against fire

<table>
<thead>
<tr>
<th>Outline of relevant EU legislation and implementing regulations</th>
<th>Transposition into national legislation:</th>
<th>Implementation and enforcement arrangements:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ukraine</strong></td>
<td>Resolution of Cabinet of Ministers of Ukraine (Sanitary Rules in Ukraine’s Forests, 1995) The Forest Code of Ukraine and the following legal acts are in the process of preparation and will take into account relevant EU legislation and implementing regulations in the framework of Ukraine’s international obligations.</td>
<td>The State Forestry Committee of Ukraine is responsible. - the State program entitled ‘Forests of Ukraine for 2002 – 2015’ provides such funding. The adoption of new legal acts will call for revision to this funding.</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td>Ministerial Order nr.651/23.12.2002 of Ministry of Agriculture, Food and Forests for approval of national land classification according to the risk level of producing forest fires</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enforcement: MAFRD (Ministry of Agriculture, Forests, and Rural Development) Territorial Directions for Forest Regimes and Hunting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Control of law implementation: National Authority for Control, Forest Inspectorates Local police department</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Managers of forest estate:</td>
</tr>
<tr>
<td>Country</td>
<td>Relevant Acts and Regulations</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td>Act of the 27&lt;sup&gt;th&lt;/sup&gt; of April 2001 Environmental protection law (Dz.U.2001.62.627)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Act of the 28th of September 1991 on forests (Dz.U.2000.56.679)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minister of Environmental Protection, Natural Resources and Forestry Regulation of 16th August 1999 on detailed rules on protection of forests against fire (Dz.U.1999.73.824)</td>
<td></td>
</tr>
<tr>
<td><strong>Slovakia</strong></td>
<td>Act 100/77 on forest management and state administration of forestry – duty of forest users to carry out preventive measures in protection of forests against fires</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Slovakia belongs to countries with low degree of forest-fire risk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- at the present time, there is no multipurpose regional program for protection of forest against fires elaborated in Slovakia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- special forest-fire information system does not exists in Slovakia yet</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Implementation – Ministry of Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enforcement – Ministry of Agriculture, Forestry state administration bodies (Regional Forest Office, District Forest Office), Forest Research Institute</td>
</tr>
<tr>
<td></td>
<td>Funding – state budget (national support) – subsidies for preventive measures in protection of forests against fires</td>
</tr>
<tr>
<td><strong>Estonia</strong></td>
<td>Direct funding. Money comes from the state budget. Information about forest fires will be collected and are processed in the Rescue Board System.</td>
</tr>
<tr>
<td></td>
<td>Ministry of Environment (Environmental Authority; Environmental Inspectorate)</td>
</tr>
<tr>
<td></td>
<td>Ministry of Internal Affairs (Rescue Board)</td>
</tr>
<tr>
<td>Country</td>
<td>Relevant Legislation and Implementing Regulations</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Austria</td>
<td>Law on implementation of Structural Funds</td>
</tr>
<tr>
<td>Hungary</td>
<td>Fully harmonised Decree of the Minister of the Interior No. 12/1997. (II. 26.) BM on protection of forests against fire</td>
</tr>
<tr>
<td>Latvia</td>
<td>This regulation incorporate in new regulation (EC) No 2152/2003 of the European Parliament and the Council of 17 November 2003 concerning monitoring of forests and environmental interactions in the Community (Forest Focus)</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Convention on Long-Term Transboundary Air Pollution (ratified by Ukraine); Strasbourg Resolution S1 (signed by Ukraine in Vienna in 2003)</td>
</tr>
</tbody>
</table>

**2.3. Protection of forests against atmospheric pollution**

<table>
<thead>
<tr>
<th>Outline of relevant EU legislation and implementing regulations</th>
<th>Transposition into national legislation:</th>
<th>Implementation and enforcement arrangements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amended by 31989R1613 (OJ L 165, 15.06.1989 p. 8-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amended by 31997R0307 (OJ L 051 21.02.1997 p.9-10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amended by 32002R0804 (OJ L 132 17.05.2002 p.1-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Forest Code of Ukraine and the following legal acts are in the process of preparation and will take into account relevant EU legislation and implementing regulations in the framework of Ukraine’s international obligations.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- The State Forestry Committee of Ukraine and Ministry for Conservation of Environment are responsible. |
- the State program entitled ‘Forests of Ukraine for 2002 – 2015’ provides such funding. The adoption of new legal acts will call for revision to this funding. |
### Implementing Regulations:


(OJ L 161 22.06.1987 p.1-22)
- Amended by 31989R2995 (OJ L 287 5.10.1989 p.11-12) – no longer in force
- Amended by 31994R0836 (OJ L 097 15.04.1994 p.4-19)
- Amended by 31995R1398 (OJ L 139 22.06.1995 p.4-5)
- Repealed (art.2) by 31999R2278 (OJ L 279 29.10.1999 p.3-25)


(OJ L 125 18.05.1994 p.1-44)
- Amended by 31995R0690 (OJ L 071 31.03.1995 p.25-46)
- Amended by 31997R1390 (OJ L 190 19.07.1997 p.3-19)
- Repealed (art.2) by 31999R2278 (OJ L 279 29.10.1999 p.3-25)


(OJ L 279 29.10.1999 p.3-25)

### Romania

Against atmospheric pollution it has been adopted the Law 655/2001, which is implementing the Directive 96/62/CEE on management and evaluation of air quality

The Governmental Ordinance 34/2002 has been adopted to implement the Directive 96/61/EC on prevention and integrated control of pollution

There are no specific act for forest pollution

### Poland

Act of 27th of April 2001

Environmental protection law (Dz.U.2001.62.627)

Minister of Environment

Regulation of 6th of June 2002 on the assessing of level of substances in the air (Dz.U. 2002 nr 87 poz. 798)

Minister of Environment

Regulation of 26th of November 2002 on the scope and manner of transmitting information on air pollution

### Slovakia


- it established Partial Monitoring System “Forests” (compatible also with the ICP Forests program)
- methodologically it is fully compatible with the EU legislation in this area, differences are only in funding

### Estonia


New commission regulation for detailed rules under preparation –

MAFRD (Ministry of Agriculture, Forests, and Rural Development)

Territorial Directions for Forest Regimes and Hunting

Environmental Guard

Minister of Environment

General Inspector of Environmental Protection

Regional Inspectors of Environmental Protection

Heads of the Regions

Implementation – Ministry of Agriculture, Forest Research Institute

Funding – only from own financial resources of the Ministry of Agriculture/Forest Research Institute

Direct funding. Money comes from the state budget.

1. Ministry of Environment and its Authorities
1696, 1091 and 2278 are partly expired

The old Acts have been transposed in the following Acts and Regulations:
1. Ambient Air Protection Act
2. Environmental Impact Assessment and Environmental Auditing Act
3. Environmental Monitoring Act
4. Pollution Charge Act
5. Integrated Pollution Prevention and Control Act
6. Procedure for activities concerning the pollution of the ambient air

**Austria**
Forest Code

**Czech Republic**
Forest Act 298/1995 Coll.

**Hungary**
Fully harmonised.

Act No LIV of 1996 on forests and the protection of forests,

Order of the Minister of Agriculture No 29/1997 (IV. 30.) FM
on the rules pertaining to the implementation of the Act No LIV of 1996 on forests and the protection of forests amended by the Order of the Minister of Agriculture No 31/1998 (V.6.) FM

**Latvia**
This regulation incorporate in new regulation (EC) No 2152/2003 of the European Parliament and the Council of 17 November 2003 concerning monitoring of forests and environmental interactions in the Community (Forest Focus)

**Ministry of Agriculture, Forests, Environment and Waters,**

**Ministry of Agriculture, Forestry and Game Management Research Institute**

**State Forest Service**
Forestry Scientific Institute (Level II)
### 2.4. The European Forestry Information and Communication System (EFICS)

<table>
<thead>
<tr>
<th>Outline of relevant EU legislation and implementing regulations</th>
<th>Transposition into national legislation:</th>
<th>Implementation and enforcement arrangements:</th>
</tr>
</thead>
</table>
2 Decrees by President of Ukraine on directions of national forestry development adopted in 2004. | The State Forestry Committee of Ukraine is responsible. |
|  | **Slovakia**
- has not been implemented yet – proposal of the new Forest Act contains provisions on the Forestry Information System compatible with the regulation | - the State program entitled ‘Forests of Ukraine for 2002 – 2015’ provides such funding. The adoption of new legal acts will call for revision to this funding. |
|  | **Estonia**
Main national legal Act: Personal Data Protection Act. Partly covered also with the Forest Act | To be build up the relevant system with the PHARE project. Launching from 2003 – 2005. Funding 20% Estonia and 80% EU |
|  | **Czech Republic**
Implemented, EC has to decide what really they need – in such a case, the Czech Republic is prepared complete all necessary data. | Czech Statistical Office and Ministry of Agriculture, through the Forestry Management Institute |
|  | **Hungary**
Fully harmonised. Act No LIV of 1996 on forests and the protection of forests, Order of the Minister of Agriculture No 29/1997 (IV. 30.) FM on the rules pertaining to the implementation of the Act No LIV of 1996 on forests and the protection of forests amended by the Order of the Minister of Agriculture No 31/1998 (V.6.) FM | The Ministry of Agriculture of the Republic of Latvia |
|  | **Latvia**
The State Forestry Committee of Latvia is responsible. | |
|  |  |  |
regulation (EC) No 2152/2003 of the European Parliament and the Council of 17 November 2003 concerning monitoring of forests and environmental interactions in the Community (Forest Focus)

2.5. Forestry products (Classification of wood in the rough and Statistical classification of forestry products)

<table>
<thead>
<tr>
<th>Outline of relevant EU legislation and implementing regulations</th>
<th>Transposition into national legislation:</th>
<th>Implementation and enforcement arrangements:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic act:</strong> Council Directive (EEC) No 89/68 of 23 January 1968 on the approximation of the laws of the Member States concerning the classification of wood in the rough. (OJ L 032 06.02.1968 p.12) Corrected by 368L089R(01)</td>
<td><strong>Ukraine</strong> The system of State standards of Ukraine and Statistical classification of forestry products which is harmonised and is close to the EU requirements.</td>
<td>The State Forestry Committee of Ukraine and Statistics State Committee are responsible. - the State Budget</td>
</tr>
<tr>
<td><strong>Slovakia</strong> - has not been implemented yet – Forest Research Institute is working on categories of wood in the rough.</td>
<td><strong>Estonia</strong> 89/68 has not been transposed and no transposition is foreseen. 1232/1998 has been partly transposed: 1. Official Statistics Act and in its regulations and rules</td>
<td>Direct funding from the State Budget. 1. Statistical Office of Estonia Ministry of Finance</td>
</tr>
<tr>
<td><strong>Austria</strong> Within the framework of the Wiener Börse the Austrian usances for wood trade (1973) are actually being revised. The process is expected to be finalized by spring 2005.</td>
<td><strong>Ukraine</strong> The system of State standards of Ukraine and Statistical classification of forestry products which is harmonised and is close to the EU requirements.</td>
<td>The State Forestry Committee of Ukraine and Statistics State Committee are responsible. - the State Budget</td>
</tr>
</tbody>
</table>

- The State Budget
- MAFRD National Institute of Statistics Territorial Directions for Forest Regime and Hunting

- Direct funding from the State Budget.
- 1. Statistical Office of Estonia Ministry of Finance
### Czech Republic
Czech Technical Standards represent supportive tools.

### Hungary
Fully harmonised.
Order of the Minister of Agriculture 6/2002.(I.15.)FVM
Order of the Minister of Agriculture No 29/1997 (IV. 30.) FM
on the rules pertaining to the implementation of the Act No LIV of 1996 on forests and the protection of forests

### Latvia
It is not realized and there are no future plans of realization

### 3. Forestry measures funded under the EU rural development support scheme

<table>
<thead>
<tr>
<th>Measures</th>
<th>Period of implementation</th>
<th>Amount allocated (million €)</th>
<th>Beneficiaries (e.g. state, private owners, companies etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ukraine</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Romania</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Slovakia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Sustainable forest management and forestry development</td>
<td>2004 – 2006 for all measures</td>
<td>9,5 mil. €</td>
<td>non-state forest owners and users</td>
</tr>
<tr>
<td>a) Investments for the improvement and rationalization of silviculture and forest protection, harvesting, primary wood processing and marketing of wood and non-wood products (profitable investments).</td>
<td></td>
<td>8,9 mil. €</td>
<td>private forestry service companies</td>
</tr>
<tr>
<td>b) Public welfare investments</td>
<td></td>
<td></td>
<td>non-state forest owners and users</td>
</tr>
</tbody>
</table>
1. (non-profit investments)

2. Promoting the adaptation and development of rural areas
   a) Diversification of agricultural activities

3. Afforestation of agriculture land

<table>
<thead>
<tr>
<th>Estonia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Afforestation of agricultural land (incl. Abandoned agric. lands), with an exception during the programming period 2004-2006 – RDP 2004-2006</strong></td>
</tr>
<tr>
<td><strong>2. Support for forestry (5 different activities) – SPD 2004-2006</strong></td>
</tr>
<tr>
<td>Restocking of woodlands damaged by natural disasters and fire, including the preparation of soil with the purpose of contributing to natural regeneration and purchase of plants (art 30. 6th indent);</td>
</tr>
<tr>
<td>Restocking of woodlands and tending of young stands to encourage ecological diversity of species and to add value to the remaining trees (art 30 2nd indent);</td>
</tr>
<tr>
<td>Purchase of forest management and timber processing (prior to industrial processing) equipment and forest plant protection products (excl. chemicals) (art 30 2nd and 3rd indent);</td>
</tr>
<tr>
<td>Establishing associations of forest owners (art 30 5th indent);</td>
</tr>
<tr>
<td>Development projects that create new opportunities for using wood and forest products and investments into improving and rationalising the processing and marketing (prior to industrial processing) (art 30 3rd and 4th indent);</td>
</tr>
<tr>
<td><strong>2005 - … (at least at the end of next impl. period)</strong></td>
</tr>
<tr>
<td><strong>2005 – 2006</strong></td>
</tr>
<tr>
<td><strong>2006 - …</strong></td>
</tr>
<tr>
<td><strong>Private land owners:</strong></td>
</tr>
<tr>
<td>a) natural persons</td>
</tr>
<tr>
<td>b) legal persons</td>
</tr>
<tr>
<td><strong>10,7 mil. Euros</strong></td>
</tr>
<tr>
<td><strong>4,6 mil. Euros</strong></td>
</tr>
</tbody>
</table>

| state forest enterprises |
| private agriculture and forestry companies |
| private owners of agriculture land |

3. Afforestation of agriculture land

| **€** |
| 6,5 mil. € |

41,8 mil. €
### Austria

<table>
<thead>
<tr>
<th>total</th>
<th>2003</th>
<th>1,86</th>
</tr>
</thead>
<tbody>
<tr>
<td>out of these:</td>
<td></td>
<td>private sector</td>
</tr>
<tr>
<td>- forest roads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- re-afforestation of high altitude areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- forest protection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- forest fires insurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Hungary | | |
| Article 31. Afforestation on agricultural land | 2004 - 2006 | 79,68 (EU + national) |

| Latvia | | |
| - Investments in forest aimed at improving the economic, ecological or social value thereof; | May 2004-2006 | 0,2 |
| | | for one project |
| - Afforestation of utilised agricultural land; | May 2004-2006 | 0,01 |
| | | for one project |
| - Establishment of forest owners association; | May 2004-2006 | 0,15 |
| | | for one project |
| - Investment in improvement and rationalisation of harvesting, processing and marketing of forestry products; | May 2004-2006 | 0,1 |
| | | for one project |
| - Restoring of forestry production potential damaged by fire, introducing appropriate prevention instruments; | May 2004-2006 | 350 €/ha |
| - Support for replacement of low value forest stands and tree species aimed at increasing the biological diversity and ecological value. | May 2004-2006 | |
Implications (institutional, implementation and enforcement responsibilities) of the forestry sector in the implementation of the Habitat and Bird Directives:

<table>
<thead>
<tr>
<th>EU Directives</th>
<th>Institutional, implementation and enforcement responsibilities of the forestry sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bosnia &amp; Herzegovina</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Ukraine</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Official Journal L 206, 22.7.1992, pp. 7-50);</strong></td>
<td>Completely transferred in the national legislation, Law 462/2001 for the approval of the Governmental Emergency Ordinance 236/2000 concerning the regime of protected areas, the conservation of the natural habitats and of species from wild fauna and flora The implementation still requires the inventory of the sites, the establishment of management plans, including the financing</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Official Journal L 206, 22.7.1992, pp. 7-50);</strong></td>
<td>Minister of Environment defines types of forest habitats and plant and animal species to be protected under Natura 2000. Head of the Region or head of a forest district prepares and sends to the Minister of Environment the assessment of sites to be protected, carried out protective activities and their influence on the protected site and plant and animal species populations, as well as results of the carried out monitoring of activities mentioned above. Minister of Environment, after acceptance of the Council of Ministers, is sending the list of special protected areas as well as estimation of costs of protective measures on those areas to the European Commission.</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Slovakia</td>
<td>Minister of Environment defines types of forest habitats and plant and animal species to be protected under Natura 2000. Head of the Region or head of a forest district prepares and sends to the Minister of Environment the assessment of sites to be protected, carried out protective activities and their influence on the protected site and plant and animal species populations, as well as results of the carried out monitoring of activities mentioned above. Minister of Environment, after acceptance of the Council of Ministers, is sending to the European Commission the estimation of costs of measures to be taken towards protection of priority plant and animal species.</td>
</tr>
<tr>
<td>Estonia</td>
<td>Law on nature conservation</td>
</tr>
<tr>
<td>Austria</td>
<td>“under construction …”</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Ministry of Environment (joint collaboration with Ministry of Agriculture)</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
PRESENT SITUATION AND TRENDS IN ROMANIAN FORESTRY

BY IOAN VASILE ABRUDAN, VIOREL MARINESCU, GHEORGHE IGNEA, CODREANU CODRIN

1. Contribution of Forests

Romania's forests cover 27% of the country (for the main features of forests see Table 1) and include some of the last and largest tracts of natural and old growth forests still remaining in Europe.

<table>
<thead>
<tr>
<th>Table 1. Main features of Romania's forests</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total forest area</strong></td>
</tr>
<tr>
<td><strong>Forest ownership (December 2003):</strong></td>
</tr>
<tr>
<td>State-owned forests</td>
</tr>
<tr>
<td>Non-state forests</td>
</tr>
<tr>
<td><strong>Forest types:</strong></td>
</tr>
<tr>
<td>Coniferous (especially spruce)</td>
</tr>
<tr>
<td>Beech</td>
</tr>
<tr>
<td>Oaks</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td><strong>National forest stock</strong></td>
</tr>
<tr>
<td><strong>Annual growth</strong></td>
</tr>
<tr>
<td><strong>Geographical distribution of forests:</strong></td>
</tr>
<tr>
<td>Mountains</td>
</tr>
<tr>
<td>Hills</td>
</tr>
<tr>
<td>Plains</td>
</tr>
<tr>
<td><strong>Functional distribution (2003):</strong></td>
</tr>
<tr>
<td>Protection forests (not protected areas)</td>
</tr>
<tr>
<td>Production forests</td>
</tr>
</tbody>
</table>

Forests have traditionally played an important role in Romania’s social and economic development, providing an important source of rural employment and income from logging, wood processing and non-timber forest product industries. In spite of existing inefficiencies, the forestry sector is still a significant contributor to the Romanian economy.

Forest area. According to the Romanian definition there are three categories of land covered by forests: (a) forests included in the so called “forest fund”, (b) forests outside the “forest fund” and (c) land partially covered by forests (so called “forested meadows or grazing lands”). Forest area has remained approximately unchanged in the last decade in Romania: 6.6-6.7 million ha of forests and land partially covered by forests out of which 6.2-6.3 million ha are forests (Table 2).

<table>
<thead>
<tr>
<th>Table 2. Forest area (thousand ha) and the afforested area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forests and forest land</td>
</tr>
<tr>
<td>-of which forests</td>
</tr>
<tr>
<td>-of which conifers</td>
</tr>
<tr>
<td>Afforested area</td>
</tr>
</tbody>
</table>

*it does not include forest vegetation outside the forest fund.

Source: Romanian Statistical Yearbooks 1993-2002
The fluctuations of statistical data for the period 1992-2001 (Table 2) reflects the statistical reporting discrepancies rather than the real changes in the forest and forest land area in Romania. However, a slight increase in the afforestation of degraded agricultural lands after 2000 should be noticed.

Forest ownership. After the fall of communist regime in December 1989, the Government embarked on a program of land restitution. As an initial measure, under Law 18/1991, approximately 350,000 hectares of forest land were returned to around 400,000 pre-1948 individual owners (up to 1ha per owner). In 2000, another land restitution law (Law 1/2000) was passed by the Parliament and its implementation was initiated. According to this law all community, town and communal forests should be restituted to their former owners. The restitution is limited to 10 ha for individuals and 30 ha for churches, even if the size of their ownership before the 1948 nationalization was larger than these imposed limits, protected forests being exempted from restitution. By the end of September 2003, more than 1,526,000 ha of forests have been already restituted according to Law 1/2000 (see Table 3), and 30% of the Romanian forests were in non-state ownership.

<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>Claimed</th>
<th>Validated by county commissions</th>
<th>Restituted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private individuals</td>
<td>916,036</td>
<td>324,331</td>
<td>269,639</td>
</tr>
<tr>
<td>Communities / undivided private ownership</td>
<td>725,857</td>
<td>602,623</td>
<td>468,213</td>
</tr>
<tr>
<td>Churches, educational institutions</td>
<td>65,407</td>
<td>68,618</td>
<td>46,100</td>
</tr>
<tr>
<td>Municipalities, towns, communes</td>
<td>1,280,763</td>
<td>806,318</td>
<td>742,980</td>
</tr>
<tr>
<td>Total</td>
<td>2,988,063</td>
<td>1,801,890</td>
<td>1,526,932</td>
</tr>
</tbody>
</table>

Source: National Forest Administration, 2003

Forest restitution is an ongoing process and it is expected to be concluded by the end of 2004.

Forest production. In the period 1992-2003 the annual allowable cut varied between 15.5 and 17.0 million m³. It has never been exceeded by the actual harvest, excepting 1996, as a result of 1995 windthrow (see Table 4).

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ANNUAL ALLOWABLE CUT</th>
<th>ANNUAL HARVEST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL</td>
<td>OF WHICH IN STATE FORESTS</td>
</tr>
<tr>
<td>1992</td>
<td>16,500</td>
<td>15,600</td>
</tr>
<tr>
<td>1993</td>
<td>15,000</td>
<td>14,600</td>
</tr>
<tr>
<td>1994</td>
<td>14,500</td>
<td>13,900</td>
</tr>
<tr>
<td>1995</td>
<td>14,400</td>
<td>13,600</td>
</tr>
<tr>
<td>1996</td>
<td>14,600</td>
<td>13,800</td>
</tr>
<tr>
<td>1997</td>
<td>14,800</td>
<td>14,000</td>
</tr>
<tr>
<td>1998</td>
<td>15,200</td>
<td>14,200</td>
</tr>
<tr>
<td>1999</td>
<td>15,500</td>
<td>14,600</td>
</tr>
<tr>
<td>2000</td>
<td>15,800</td>
<td>14,800</td>
</tr>
<tr>
<td>2001</td>
<td>17,000</td>
<td>15,300</td>
</tr>
<tr>
<td>2002</td>
<td>16,000</td>
<td>14,200</td>
</tr>
<tr>
<td>2003</td>
<td>16,000</td>
<td>12,600</td>
</tr>
</tbody>
</table>

* Data not available

Source: National Forest Administration, 2003
Among the 307 enterprises with more than 50 employees performing timber processing (except furniture sector) in 2002, the State still owned some shares only in nine companies, so the vast majority were private companies. In the same year, the number of wood processing companies employing less than 50 employees was 5468 (National Institute of Statistics, 2002). In 2002 there were about 2900 companies which produced furniture or component parts for furniture.

About 28,000 people were employed in 2001 in forest administration and management, circa 15,000 in wood harvesting, 67,000 in the woodworking industry, 21,000 in the pulp and paper industry and 104,000 in the furniture industry (Istratescu et al. 2001).

The total number of employees in forest management, logging and game management decreased continuously in the last decade, from 81,000 in 1992 to 42,000 in 2001 (Table 5).

Table 5. Number of employees in forest management, logging and game management

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees (thousands)</td>
<td>81</td>
<td>77</td>
<td>86</td>
<td>78</td>
<td>71</td>
<td>62</td>
<td>53</td>
<td>47</td>
<td>47</td>
<td>42</td>
</tr>
</tbody>
</table>

Source: Romanian Statistical Yearbooks, 1993-2002

In the period 1991 - mid 2003, the number of employees in state forest management (National Forest Administration) decreased from 39561 in 2001 to 27098 in 1999 and 25830 in mid 2003 (Table 6). Whilst the significant reduction in the period 1991-1999 was due to the restructuring of NFA and the externalisation of some of its previous activities, afterwards the restitution of forests (based on the provisions of Law 1/2000) has been another factor which affected the decrease of jobs in NFA.

Table 6. Number of employees of the National Forest Administration

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of NFA employees</td>
<td>39561</td>
<td>31220</td>
<td>27098</td>
<td>28008</td>
<td>25830</td>
</tr>
</tbody>
</table>

Source: National Forest Administration, 2003

The contribution of the forestry (including the processing sector) to GDP ranged between 4.5-5% in the last years. The annual export value of forest products in the last four years (including processed timber and furniture) exceeded 1 billion US$ - approximately 11% of all Romanian exports. The export value and wood products and furniture increased continuously in the last ten years, despite some fluctuations of pulp, paper and cardboard export (Tables 7 and 8).

Table 7. Export value of wood and wood products, except furniture (million US$)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Timber and processed timber (except furniture)</td>
<td>155</td>
<td>177</td>
<td>222</td>
<td>258</td>
<td>296</td>
<td>338</td>
<td>385</td>
<td>495</td>
<td>532</td>
<td>532</td>
</tr>
<tr>
<td>Pulp, paper and cardboard</td>
<td>17</td>
<td>19</td>
<td>34</td>
<td>85</td>
<td>58</td>
<td>64</td>
<td>46</td>
<td>48</td>
<td>76</td>
<td>88</td>
</tr>
</tbody>
</table>

Source: Romanian Statistical Yearbooks, 1993-2002
In the recent years Romania has exported about 80% of its furniture production (see Table 8). The furniture production is a very important economic sector which has adapted after 1990 itself very quickly to the market economy, representing about 5.6% of the industrial product export, but it is mainly the furniture industry which includes 5.7% of industry’s employees. If other activities are also taken into account (services, furniture trade, complementary industry, etc.) than furniture industry in Romania provides over 15% of places of work (Cismaru, 2003). The export of furniture during 2001 was mainly directed to the major markets of the world: Germany, France, Holland, Italy, Austria, Great Britain, USA etc.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>million US $</td>
<td>460</td>
<td>590</td>
<td>608</td>
<td>640</td>
</tr>
<tr>
<td>Export</td>
<td>million US $</td>
<td>356.7</td>
<td>483</td>
<td>444.6</td>
<td>500</td>
</tr>
<tr>
<td>Export from the total production</td>
<td>%</td>
<td>78</td>
<td>82</td>
<td>73</td>
<td>78</td>
</tr>
<tr>
<td>Export in EU countries</td>
<td>million US $</td>
<td>275</td>
<td>377</td>
<td>360.7</td>
<td>413.2</td>
</tr>
<tr>
<td>Export in EU from total export</td>
<td>%</td>
<td>77</td>
<td>78</td>
<td>81</td>
<td>83</td>
</tr>
<tr>
<td>Number of employees</td>
<td>thousand persons</td>
<td>161</td>
<td>148</td>
<td>109.1</td>
<td>104.3</td>
</tr>
<tr>
<td>Work efficiency</td>
<td>thousand US $</td>
<td>2.86</td>
<td>3.99</td>
<td>5.57</td>
<td>6.14</td>
</tr>
</tbody>
</table>

Source: Cismaru, 2003

The total volume and value\(^{36}\) of non-wood forest products harvested by the National Forest Administration in 2000 was as follows (Abrudan, 2002):

- Wickerwork: 9155 tones/ 39,396 mil. RoLei;
- Forest Seeds: 36,2 tones/ 709 mil. RoLei;
- Forest Fruits + Mushrooms: 5627 tones + 409 tones/ 75,410 mil. RoLei;
- Game Meat + Live game: 182.5 tones + 150,170 pcs./ 76,609 mil. RoLei;
- Fish (mainly trout): 602,2 tones/ 30,564 mil RoLei;

The non-pecuniary values of forests are, however, considerably larger than the financial values, but traditional accounting methods have tended to mask this. A study commissioned by the World Bank in 1998-1999 showed that the annual value of products and services (including the environmental ones) provided by the Romanian forests is around 3.1 billion US $.

Nature conservation. The Romanian Network of Protected Areas covers 1,234,710 ha or 5.2 % of the country’s area. Apart from the Danube Delta Biosphere Reserve there are other seventeen large protected areas - national parks and natural parks, including 134 nature reserves and natural monuments (see Table 9), and covering 1,132,176 ha. 693 nature reserves and natural monuments are outside the large protected areas and cover 102,534 ha.

Before 1999 none of the large protected areas had legally established administrative structures in place, except Danube Delta Biosphere Reserve. This situation was determined by the poor capacity of the state budged to finance the administration of protected areas. Under these circumstances the only effective legal tool to protect the forests within the protected areas had been the forest management plan. According to the provisions of the forest management plans about 477,000 ha of forests are included in the national network of protected areas and around half of them are strictly protected.

In 1999 the World Bank – GEF funded Biodiversity Conservation Management Project became effective and administrations for three large protected areas (Retezat National Park, Piatra Craiului National Park and Vanatori Neamt Natural Park – a new

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\(^{36}\) The real volume and value are larger as the statistics do consider only the non-wood forest products collected by National Forest Administration and not those collected/harvested by private persons.
protected area) were established within the National Forest Administration (NFA), as part of the three main objectives of the Project: (1) Strengthening the national framework for biodiversity conservation; (2) Developing models for protected areas management, and (3) Building public support for biodiversity conservation.

Table 8. Large protected areas in Romania

<table>
<thead>
<tr>
<th>Name</th>
<th>National Status</th>
<th>International Status</th>
<th>Area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muntii Rodnei</td>
<td>National Park</td>
<td>Biosphere Reserve</td>
<td>46,399</td>
</tr>
<tr>
<td>Calimani</td>
<td>National Park</td>
<td></td>
<td>24,041</td>
</tr>
<tr>
<td>Vanatori Neamț</td>
<td>Natural Park</td>
<td></td>
<td>30,818</td>
</tr>
<tr>
<td>Ceahlau</td>
<td>National Park</td>
<td></td>
<td>8,396</td>
</tr>
<tr>
<td>Cheile Bicazului - Hasmas</td>
<td>National Park</td>
<td></td>
<td>6,575</td>
</tr>
<tr>
<td>Balta Mica a Brailei</td>
<td>Natural Park</td>
<td>Ramsar Site</td>
<td>17,529</td>
</tr>
<tr>
<td>Muntii Macinului</td>
<td>National Park</td>
<td></td>
<td>11,321</td>
</tr>
<tr>
<td>Delta Dunarii</td>
<td>National Park</td>
<td>Biosphere Reserve Ramsar Site, World Heritage Site</td>
<td>580,000</td>
</tr>
<tr>
<td>Bucegi</td>
<td>Natural Park</td>
<td></td>
<td>32,663</td>
</tr>
<tr>
<td>Piatra Craiului</td>
<td>National Park</td>
<td></td>
<td>14,800</td>
</tr>
<tr>
<td>Cozia</td>
<td>National Park</td>
<td></td>
<td>17,100</td>
</tr>
<tr>
<td>Gradistea Munceluți - Cioclovina</td>
<td>Natural Park</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td>Retezat</td>
<td>National Park</td>
<td>Biosphere Reserve</td>
<td>38,047</td>
</tr>
<tr>
<td>Domogled-Valea Cernei</td>
<td>National Park</td>
<td></td>
<td>60,100</td>
</tr>
<tr>
<td>Portile de Fier</td>
<td>Natural Park</td>
<td></td>
<td>115,655</td>
</tr>
<tr>
<td>Cheile Nerei – Beusnita</td>
<td>National Park</td>
<td></td>
<td>37,100</td>
</tr>
<tr>
<td>Semenic Cheile Carasului</td>
<td>National Park</td>
<td></td>
<td>36,664</td>
</tr>
<tr>
<td>Muntii Apuseni</td>
<td>Natural Park</td>
<td></td>
<td>75,784</td>
</tr>
</tbody>
</table>

Source: Tamas and Abrudan, 2003

Despite the fact that the development of effective management plans for other five protected areas (Ceahlau, Balta Mica a Brailei, Portile de Fier, Apuseni and Muntii Macinului) has been supported by international projects (Life Natura, Global Environmental Facility – GEF etc.), none of them had legally established administrative structures.

In early 2002 the Board of the National Forest Administration decided the establishment of the administrations for all national and natural parks under its Protected Areas Service, considering that in all of them the majority of the area is covered by forests. However, this was an internal decision and although it has significantly contributed to the improvement of nature protection infrastructure, the public authority responsible for environmental protection had not approved officially the establishment of these administrations.

A recent legislative development in nature protection and protected area administration - the “Governmental Decision 230/2003 regarding the delineation of the biosphere reserves, national parks and natural parks and the establishment of their administrations”, approved in March 2003 – created the proper framework for the administration of large protected areas. Article 8 specifies that the public authority for environmental protection will ensure in six months after the publication of the
governmental decision in the Official Gazette the establishment of administrative structures for all biosphere reserves, national and natural parks. The administrative structures can be either (a) in the subordination of the public authority responsible for the environmental protection or (b) under the coordination of the public authority responsible for the environmental protection, based on a contract with bodies capable to prove their technical, scientific, administrative and financial capacity for protected areas administration. It also mentions that the main land owner in a protected area has the right to administer the respective protected area (on a contractual basis) if the above mentioned capacity is proved. The minimum duration for the administration contracts is 10 years.

Under these new circumstances, the National Forest Administration submitted its offer for the management of the national and natural parks and in February 2004 the public authority for environmental protection assigned the management of all national and natural parks (except Ceahlau) to NFA, on a contractual basis.

2. Main Issues
Sustainable forest management and the development of the forest sector in Romania is affected by three categories of factors: (a) internal factors, residing within the forest sector itself, (b) external factors, residing outside the forest sector and (c) international processes, including the EU accession process. Considering the direct and indirect linkages between them, each of these categories of factors can be hardly separated from the others.

The internal factors affecting the forest sector are mainly linked to the wood resource, the wood market and the institutional arrangements for forest management and administration.

There have been no significant changes in the wood resource in Romania in the last decades, as the forest area and species composition remained almost unchanged. However, due to the slightly unbalanced age classes and the selective harvesting of valuable species in some parts of the country, it is expected that the quality of wood to be harvested on a medium-long term will decrease. On the other hand, the recent restitution of almost a third of the Romanian forests might lead to an increased harvest and wood supply from these forests - mainly for economic reasons - compared to the previous management practiced by the National Forest Administration, which had an important ecological/protection component.

Despite the fact that the average price of wood (standing or roadside) has increased 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. 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.

The institutional changes in the forestry sector have known a tumultuous evolution after 1990. If during the communist period the regulatory, supervisory and ownership (management of the state-owned forest property) functions were in one hand (Ministry of Forests), in early 1990 the first two functions of the state were separated from the management of the state-owned forest property function via the establishment of the National Forest Administration (reorganized several times since then).

Department of Forests (within the Ministry of Environment before 2001 and the Ministry of Agriculture afterwards) has been the public authority responsible for forests in Romania. In spite of the many changes, the regulatory and supervisory/support functions were contained in different directorates of the Department of Forests.
In 1999 the Forest Inspectorates were established, initially with 7 territorial branches, which were expanded to 16 branches in 2001, as the restitution process was imminent. Their function was to enforce at regional level the supervision/support functions of the public authority for forests. Due to the Cabinet re-organization, in spring 2003 the Forest Inspectorates were transferred to the National Environmental Guard within the National Authority for Control and left the Department of Forests without any territorial structures. This situation changed in January 2004, when Territorial Directorates for Forest Regime and Hunting were established in each of the 8 development regions of the country. They are supposed to perform the administrative, technical and extension functions of the public authority for forests, the supervisory/control one remaining with the National Environmental Guard.

The Department of Forests faces some difficulties regarding the capacity and physical resources to undertake its roles and staffing has not reached the initial planned level due to budgetary constraints. However, a World Bank loan (Forestry Development Project) for the forestry sector would significantly strengthen the institutional capacity of the Department of Forests, as the loan became effective recently.

The National Forest Administration (NFA) administrates and manages the state forests and is a legal state-owned entity with an essentially commercial mandate. It has 37 branches and 372 forest districts and operates as a financially autonomous organization performing forest management and silvicultural operations, engaging in non-timber forest products and services. It undertakes a wide range of public purpose activities and is responsible for the management of protected forest areas and national parks. NFA also has in its administrative structure the Forest Research and Management Planning Institute.

The NFA is like many state-owned organizations coming under increasing political pressure and public scrutiny regarding the stewardship of state assets under its management. Forest restitution has already reduced the NFA area by up to 30% with consequent reduction in revenues and the greater impact on fixed costs. This reduced area will contain a higher proportion of protection and public purpose forest. The focus to date, despite the major issues facing the company, has been principally on staffing at branch and district offices and less on processes, operational efficiency and exploring choices or options for its strategic development. The NFA should address a number of major issues in the short to medium term including: impact of forest restitution, continuance of public purpose activities in protection forests, functional organization, appropriate staffing levels, increasing pressure to privatize its non-core activities, information systems, management of protected areas etc. (World Bank, 2002).

An important institutional milestone in the evolution of the forestry sector in Romania after the fall of communism was the establishment of the first private forest district (an administrative/management structure for private forests, similar to those of NFA) in spring 2002. Since then, 61 private forest districts have been established (managing more than 600,000 ha of forests) and their number is expected to double in the next couple of years, in parallel with the reduction of NFA forest districts, as a consequence of the restitution process. Although NFA will remain the main player in forest management in Romania, the private forest districts will play an increasing role on the wood market.

The Association of Private Forest Owners (APPR) is a national umbrella organization established in 1998 and representing all categories of private forest owners in Romania. Its membership includes local and county associations, communes, town halls and individual members. The APPR has an important role to play in the sustainable management of restituted forests as their owners or applicants
under the restitution program are unaware not only of their rights and obligations but also the value to be derived from the sale of timber and other products and the importance of sustainable forest management. Despite its important role, APPR is facing financial and staffing problems, but this situation will change soon as technical assistance to develop a medium term business development plan, support for a core permanent professional staff, basic office equipment and assistance with publications and extension services are expected to be provided to APPR in the frame of the Forest Development Project (World Bank loan).

Regarding the external factors, residing outside the forest sector it should be mentioned that there is a complex network of public policies and legislation which directly and indirectly affects the development of the forest sector in Romania: (a) policies establishing the institutional framework, (b) policies related to specific economic sectors, and (c) policies promoting development (Abrudan, 2002).

In the last decade the economic situation (and especially economic growth) has significantly affected the forestry sector, including forest management. For example, the years of economic decline have negatively impacted on the activity of logging and processing companies and indirectly reduced the volume and quality of forest operations, as well as the income of the National Forest Administration and its investment capacity. This situation has changed in the last four years and the improvement of the economic situation is expected to continue. On the other hand, the budget allocation for forestry has been limited and many of the Governmental programmes related to forestry were only partially achieved.

The restitution of forest land and the privatization of wood harvesting, transport and the processing sector have probably had the highest impact on the development of the forestry sector and forest management in Romania. The size of the restituted forests according to Law 18/1991, which in many cases represented only part of the pre-nationalization individual ownership, created frustration among forest owners. In addition, the poor capacity to enforce the forest legislation and to raise forest owners’ awareness on sustainable forest management resulted in significant environmental damages in private forests. Although private forest management structures have been established, the general opinion is that in the short term, the forests restituted according to the second restitution law promulgated in 2000, will face some management difficulties. The reasons for this include: lack of capacity and knowledge; vested interest in gaining immediate economic benefits; and improper law enforcement capacity.

The almost completed privatization of wood harvesting, transport and processing has had mainly positive effects on forest management. Privatization resulted in a higher competition for wood resources and increased prices for standing wood, with direct financial benefits for National Forest Administration.

The public financing has a direct impact on the development of the forestry sector as the regulatory, control and extension functions of the state are depending on the annual budget allocation. Budgetary allocation for forest sector has been relatively small in the last decade, thus particularly affecting the control and extension functions, as well as the public authority staff quality and commitment.

In previous years the agricultural policies and legislation have had some important influences on forest sector development. An important aspect of Romanian forestry is that any agricultural policy and regulation must not lead to the reduction of the public forest area. Indeed the afforestation of degraded agricultural land is a priority within the present Governmental policy to increase the forest cover. Such priorities also agree with EU agricultural and rural development policies, given that Romania’s forest cover per capita is presently lower than the EU average. Some agricultural policies as well as agricultural activities have negative effects on forests and forest management.
Despite being forbidden by law, grazing represents by far the main problem, and the capacity to enforce the legislation in this respect should increase.

Game management and hunting legislation are also impacting on forest management. According to the existing legislation the central public authority for game management assigns the game management right to the legally established hunting organizations. This provision has created some conflicts between hunting organizations and private agricultural and forest land owners, so this situation should be addressed in the near future.

The last decade has been characterized by an almost continuous dispute between the ministry responsible for forest management and the public authority responsible for wood harvesting and processing. While the first one has taken measures towards a better use of forest resources, free competition for wood resources and harvesting methods fulfilling ecological requirements, the latter has been fighting and lobbying for a cheap resource and advantageous contractual terms for wood harvesting. In early 2001, the Cabinet approved the supervision of the reserve price for standing wood that the National Forest Administration sells by auction. This has been perceived as a state intervention to control the standing wood price in areas where the competition for wood resource is low, so there is an urgent need to remove this supervision which is not common in a free-market economy.

In the period 1990-2000, forests, environmental protection and water management were under the same public authority (ministry) and as a result of this situation there were no major conflicts between these sectors. The Medium-Term Environmental Protection Strategy includes strategic objectives with direct positive influence on forest development: extension of forest area; establishment of forest belts in areas exposed to desertification; afforestation of degraded agricultural land and improvement of the legislation on forest protection.

There have been many linkages between forestry and nature conservation in the last century. While intensive logging had negative impacts on nature conservation in the first half of the twentieth century, the close to nature approach that has been practiced extensively since the 1950s in Romanian forestry has reduced such impacts. Many forest ecosystems and wildlife species have been preserved due to the efforts of the foresters. Forest organisations have also been largely involved in most of the processes, programs and activities related to nature conservation in the last decade including the establishment of the administrations for the first three protected areas (two national parks and one natural park) in the Carpathians. Despite the fact that foresters and forest organizations have significantly contributed to nature conservation, there has also been situations when their actions have had negative impacts. There are examples of negative cumulative effects of harvesting on water quality, flora and fauna. However, in the last decade foresters have increasingly become more open to the dialogue with conservation organizations and the general public on nature conservation issues. The recent assignment of NFA to manage almost all large protected areas in Romania will certainly improve its nature conservation skills as well as its cooperation with other stakeholders.

There are close linkages between tourism and forestry, especially in the Carpathian region and recently the cooperation between the public authorities responsible for tourism and forestry has improved significantly. The national authority for tourism participated actively in the development of the National Forest Policy and Strategy. The development of eco-tourism has become a priority action both for the forestry sector and the public authority responsible for tourism. While the presence of forest seems to have a positive impact on tourism, the latter has mainly had a relatively negative impact on forests: clear-felling to allow development and construction of hotels, restaurants, skiing facilities etc.; garbage left in the forest by
tourists; illegal camping and picnicking; and forest fires caused by the negligence of tourists are relevant examples.

Development and modernization of the road infrastructure (public and forest roads) have both negative and positive impacts on forest sector development. The negative impacts result from forest clear-felling to make room for new public roads or motorways. In many cases the Government approves the clear-felling and exempt the development from the land use change tax. On the other hand, the development of the transport infrastructure has a positive impact on forest management, as it provides better access to forest resources, both for harvesting and tending and maintenance operations.

Although there is no separate public authority responsible for rural development, this sector is highly important, especially within the framework of the EU accession process. Romania has developed a National Plan for Agriculture and Rural Development (NPARD) and significant EU support for the NPARD implementation in the period 2004-2006 will be available to Romania under SAPARD. Some of the measures eligible for funding under SAPARD are directly related to forestry and will have a positive influence on forest sector development: afforestation of land inappropriate for agriculture; establishment of forest nurseries; construction of forest roads, wood harvesting; wood processing and establishment of local associations of private forest owners. There is an immediate need to develop the capacity of the public authority for forests to support and monitor the implementation of the SAPARD forestry measures.

Forestry education and research play an important role in the development of the forestry sector. Forestry high schools and the higher education institutions provide the technical staff employed by the sector and also carry out forestry research. The recent years “inflation” of graduates of both medium and higher education institutions has impacted both positively and negatively on the development of the forest sector. The negative effect resulted from the lower level of knowledge of the graduates. The quality of education was affected by the increased number of students, while the higher competition for a job in the forest sector led to the employment of qualified staff. It is a clear need in a short-medium term to correlate the number of students with the employment capacity of the forestry sector.

In recent years the fields of research have been adapted to the needs of the forest sector development. However, the research institute, like many other organizations with a mandate for forest research is finding it increasingly difficult to source funding. While it has the professional and technical expertise to implement management planning and research, it needs to increase its capability in identifying international funding lines.

International processes regarding forest management or associated with forests have played and will continue to play an important role in the development of the forest sector. As signatory of several international conventions or agreements (see Table 9) Romania has the obligation to implement and enforce their provisions in the country.

The resolutions of the Pan-European Ministerial Conferences on the Protection of Forests, the Convention on Biological Diversity (1992) and the Kyoto Protocol (1997) are probably the international processes with the highest impact on the development of the forest sector in Romania, especially at the forest management level. Forest certification is also influencing the development of the forest sector and its benefits cannot be neglected in a country which is a net exporter of wood and wood products.

Integrating forest management and planning within the broader context of rural development, agriculture and landscape planning has become an important issue especially in the context of EU accession and adoption of the Acquis Communautaire.

<table>
<thead>
<tr>
<th>Name of the document</th>
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<tbody>
<tr>
<td>International Plant Protection Convention – 1951</td>
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</tr>
<tr>
<td>International Convention for the Protection of New Varieties of Plants (UPOV) – 1961</td>
<td>●</td>
</tr>
<tr>
<td>Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention) – 1971</td>
<td>○</td>
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<tr>
<td>Convention Concerning the Protection of World Culture and Natural Heritage (UNESCO World Heritage) – 1972</td>
<td>●</td>
</tr>
<tr>
<td>Convention on Long-range Transboundary Air Pollution – 1979</td>
<td>●</td>
</tr>
<tr>
<td>Convention on the Conservation of European Wildlife and Natural Habitat (Bern convention) – 1979</td>
<td>●</td>
</tr>
<tr>
<td>Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) – 1980</td>
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<tr>
<td>Convention for the Protection of the Ozone Layer (Vienna Convention) – 1985</td>
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<tr>
<td>Convention on Biological Diversity – 1992</td>
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<tr>
<td>Convention on the Protection and Use of Transboundary Watercourses and International Lakes – 1992</td>
<td>●</td>
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<tr>
<td>Framework convention on Climate Change – 1992</td>
<td>●</td>
</tr>
<tr>
<td>Pan-European Ministerial Conference on the Protection of Forests Resolutions (S, H, L, V)</td>
<td>○</td>
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</tbody>
</table>

● ratified or equivalent ○ signed or equivalent

Among issues with relevance to the forest sector in Romania as an accession country, harmonisation of national legislation with the EU legal framework stands out. It is the key feature of the pre-accession strategy, and a precondition for accession, which is expected to be concluded in 2007.

A high priority has been accorded to the relevant regulations concerning forests and forestry: protection of forests against atmospheric pollution\(^{37}\) and forest fire\(^{38}\) (the emphasis is on ensuring that arrangements for monitoring and prevention mechanisms are appropriate), the marketing of forest reproductive material\(^{39}\), removal

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of market distortions and obstacles\textsuperscript{40, 41}, and the establishment of a European Forestry Information and Communication System (EFICS)\textsuperscript{42}.

Although not the direct responsibility of the forest sector, the establishment of a network of protected sites under the NATURA 2000 programme underpinned by the so-called “Habitats Directive”\textsuperscript{43} and “Birds Directive”\textsuperscript{44} is also affecting the sustainable management and conservation of forest areas.

Romania’s effort towards harmonization of national legislation and administrative arrangements with EU Directives and Regulations has led to a better inter-sectoral cooperation and coordination on specific cross-sectoral issues. For example the requirements set for the Natura 2000 network requires a continuous cooperation between the public authorities responsible for nature conservation, environment, waters, forests and land use.

3. Policy Options

In recent years the formulation of policy and development planning has been characterized by inter-administrative and governmental agency cooperation, as well as involvement of the main stakeholders, public participation and transparency. As many other sectoral policies, the National Forest Policy and Strategy was developed through an open, transparent and participatory processes, coordinated by the public authority responsible for forests (see Box 1).

The National Forest Policy and Strategy is in accordance with the national development strategy, and includes clear policy statements and strategic objectives (see Box 2). Sectoral strategic actions and measures (including objectives, deadlines, budget and responsibilities) for the short and medium term have also been developed and beginning with 2001 the Government has closely monitored their implementation.

A series of priorities regarding the implementation of NFPS and the sustainable development of the forest sector should be addressed in a short and medium term.

The institutional strengthening of the Department of Forests in the MAFWE should represent a priority for the development of the forestry sector. Apart from the strengthening of the existing Directorates within the Department, there is now an urgent need for the development of a strong unit to coordinate the activities related to private forests, considering the recent forest restitution process. The Department of Forests should also be able to provide extension services though its territorial units. The recently established Territorial Directorates should be properly staffed and equipped as their role will significantly increase in the new forest ownership context.

\begin{itemize}
\item \textbf{Council Directive 68/89/EEC of 23 January 1968 on the approximation of the laws of the Member States concerning the classification of wood in the rough is, in principle, relevant. However, the Member States rarely apply it, because the kind of timber it applies to is not traded anymore in significant quantities.}
\item \textbf{Plant-health controls relevant to imports of timber in the rough from non-member countries is also relevant, but since the accession countries have usually assigned the responsibility for this issue to authorities not dealing with forestry, it is excluded from the scope of this analysis.}
\end{itemize}
Box 1. The National Forest Policy and Strategy (NFPS) development process and stakeholder groups involved (World Bank 2001)

**Stakeholder groups involved:** public authorities for forests, environmental protection, agriculture, waters, industry and trade, tourism; state forest administration (all administrative levels); private forest owners (national and regional levels); private sector (forest management planning, logging, primary processing); Environmental Protection Agency; local governments and councils; Romanian Academy; research (forest management, logging, wood processing); education (universities); administrations of protected areas; non-governmental organizations; development organizations (World Bank, European Commission offices in Romania); general public; mass-media.

Box 2. The policy statement and the strategic objectives included in the National Forest Policy and Strategy

**Policy:** TO ENSURE FOREST MANAGEMENT ACCORDING TO THE PRINCIPLES OF SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES, TAKING INTO ACCOUNT THE DIVERSITY IN FOREST LAND OWNERSHIP

**Strategic objectives:**
- Modification and development of the organizational structures for forest administration and control of law enforcement in order to adapt them to the diversification in forest land ownership
- Establishment of the institutional framework to implement the principles of sustainable forest management and the assurance of the necessary implementation framework through the forest management planning process
- Assurance of the integrity and enlargement of the forest fund, and enlargement of the area covered by forest vegetation on other lands
- Assurance of the stability and improvement in the functional efficiency of forest ecosystems
- Improvement in the accessibility of the forest fund
- Reconstruction of degraded forests (economic and ecological)
- Support of forest land owners for sustainable forest management
- Conservation of the forest ecosystem biodiversity and development of the necessary institutional framework
- Integration of representative forest ecosystems in the national network of protected areas
- Sustainable management of game and fish resources within the forest area
- Development of the supply of non timber forest products and services
- Awareness campaign for the public, forest land owners, decision makers and politicians regarding the national forest resources
A human resource development program and the acquisition of the physical resources needed to fulfill its basic role should constitute short-term priorities for the Department of Forests.

The Department of Forests will play an important role in the establishment and development of the private forest management structures. The Department and its Territorial Directorates should increase their capacity to coordinate and monitor the development and functioning of the private forest districts in order to ensure the sustainable management of private forests.

In the legislation development process the Department of Forests should enhance its collaboration and dialogue with the main forest stakeholders and interest groups (private owners, private sector, research and education, conservationists, NGOs etc.) in order to adequately reflect and represent their opinions and interests.

While presently about 30% of the Romanian forests are in non-state ownership, the role and mandate of the National Forest Administration (NFA) should be adapted to its new position in the Romanian forestry sector. The administrator of the state forests should enhance its commercial mandate as it has to face the private sector competition. The development of a detailed and phased plan for the strategic development and future role of the NFA should be a priority. This would involve the development of its organizational, operational and commercial efficiency, as well as optimizing its contribution to the economy of Romania, through the sustainable management of state forest resources. Considering the fact that the reserve price for timber is presently supervised by the Competition Office it is needed to devise and elaborate an objective and auditable process for determining reserve pricing for timber auctions. The National Forest Administration and the Department of Forests should decide on the position of the Forest Research and Management Planning Institute (ICAS) in the forestry sector as it is unusual to have such an institute within the National Forest Administration.

The National Association of Private Forest Owners (APPR) as well as the local associations will play an important role in the management of private forests and the promotion of private owners’ interests. APPR should be supported to fulfill its role in the sustainable development of restituted forests and their new forest owners through:

(a) facilitating the development and consolidation of local and county ownership associations;
(b) facilitating access and drawdown of SAPARD funding;
(c) lobbying at national level;
(d) public awareness at national and local levels; and
(e) development and provision of extension services.

With regard to future ownership, the maintenance of the ecological functions of the restituted forests (e.g. climate, soil and watershed protection, biodiversity etc.) should represent a priority, especially in the mountain areas. The development and enforcement of the appropriate regulations and the development of financial mechanisms (financial assistance/compensations, tax exemptions, etc.) to support sustainable forest management, as well as the development of alternative income generating activities in rural areas, are potential ways to achieve this objective. Such development will however require a concerted and coordinated effort of the Department of Forests, Territorial Directorates, APPR, local associations of private owners and the central and local authorities.

Considering the high production and protection value of Romanian forests and the public services provided by forest ecosystems, as well as the ongoing changes in forest ownership there is a strong need for a public awareness campaign on sustainable management and conservation of forest resources. The campaign should target key stakeholders including: the general public, with particular emphasis on
communities living in forested areas; private forest owners (individuals and communities); Territorial Directorates; Government decision makers, and other influential groups including the Church and NGOs.

**Literature cited:**


**ANNEX I – SYMPOSIUM AGENDA**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>07:30 – 08:30</td>
<td><strong>Breakfast</strong></td>
</tr>
<tr>
<td>9:00 – 09:30</td>
<td><strong>Registration of participants</strong></td>
</tr>
<tr>
<td><strong>Opening Part</strong></td>
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</tr>
<tr>
<td>09:30 – 09:40</td>
<td>Peter Herbst, Opening of the symposium – Coordinator IUFRO UNIT 6.13.00</td>
</tr>
<tr>
<td>09:40 – 09:55</td>
<td>Viorel Marinescu, Welcome address (Director – Forest Strategy and Legislation, Ministry of Agriculture, Forests and Rural Development)</td>
</tr>
<tr>
<td>09:55 - 10:10</td>
<td>Constantin Corduneanu, Welcome address (Director – National Forest Administration – ROMSILVA)</td>
</tr>
<tr>
<td>10:10 – 10:30</td>
<td>Ioan Vasile Abrudan, Welcome address and logistical/organisational arrangements</td>
</tr>
<tr>
<td>10:30 – 10:35</td>
<td>Joint picture of participants before the bus departure</td>
</tr>
<tr>
<td>10:35 – 11:00</td>
<td><strong>Coffee break</strong></td>
</tr>
<tr>
<td><strong>Session I – Presentations</strong></td>
<td></td>
</tr>
<tr>
<td>11:00 – 11:20</td>
<td>Stoyanov Nickola, Bulgaria forest development project</td>
</tr>
<tr>
<td>11:20 – 11:40</td>
<td>Storozhuk Vitaliy, SWOT analysis of the Ukrainian Forest Legislation Development</td>
</tr>
<tr>
<td>11:40 – 12.00</td>
<td>Torosov Artem, Current issues of forest legislation of Ukraine</td>
</tr>
<tr>
<td>12:00 – 12.20</td>
<td>Herbst Peter, The armenian forest code – status and recent developments</td>
</tr>
<tr>
<td>12:20 – 12:30</td>
<td>Avdibegovic Mersudin, Challenges in the implementation of the law on forests in the federation of Bosnia and Herzegovina</td>
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<tr>
<td>12:30 – 13:40</td>
<td><strong>Lunch</strong></td>
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<tr>
<td><strong>Session II - Presentations</strong></td>
<td></td>
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<tr>
<td>13:40 – 14:00</td>
<td>Jovic Dusan, Participatory approach in creation of forestry and environmental legislation in Serbia</td>
</tr>
<tr>
<td>14:00 – 14:20</td>
<td>Hosseini Seyed Mohsen, Forest law and environmental legislation in Iran</td>
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<tr>
<td>14:20 – 14:40</td>
<td>Discussions</td>
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<tr>
<td>14:45 – 19:00</td>
<td>Bus departure/arrival, Short visit to Brasov (old town center, Black Church, Catherine’s Gate)</td>
</tr>
<tr>
<td>19:30</td>
<td><strong>Official Dinner</strong></td>
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<td></td>
<td>Restaurant Sura Dacilor (Poiana Brasov)</td>
</tr>
<tr>
<td><strong>Friday, 18 June</strong></td>
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<tr>
<td>07:30 – 08:30</td>
<td><strong>Breakfast</strong></td>
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<tr>
<td><strong>Session III - Presentations</strong></td>
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<tr>
<td>8:50 – 9:15</td>
<td>Bouriaud Laura, Institutional patterns of forest sector sustainable development: insights from the economics of property rights</td>
</tr>
<tr>
<td>9:15 – 9:35</td>
<td>Polyakova Lybov, Comparative analysis of the structure of state forest management in the number of european countries and prospects in reformation of forest management in Ukraine</td>
</tr>
<tr>
<td>8:35 – 9:50</td>
<td>Bouriaud Laura, Environmental law developments in support of sustainable forest management</td>
</tr>
<tr>
<td>9:50 – 10:10</td>
<td>Ayanoglu Sedat, Interventions and restrictions on property for the benefit of environment, forests and other natural resources in Turkey</td>
</tr>
<tr>
<td>10:10 – 10:30</td>
<td>Ghelichkhani Mohammad Masoud, Translation european forest laws into new Iranian forest legislation</td>
</tr>
<tr>
<td>10:30 – 11:00</td>
<td><strong>Coffee break</strong></td>
</tr>
<tr>
<td>Time</td>
<td>Presenter</td>
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<tr>
<td>11:00 – 11:20</td>
<td>Devrim Elvan</td>
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<td>11:20 – 11:35</td>
<td>Brioudes Mathieu</td>
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<tr>
<td>11:35 – 11:55</td>
<td>Sulek Rastislav</td>
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<tr>
<td>11:55 – 12:20</td>
<td>Golob Aleksander</td>
</tr>
<tr>
<td>12:20 – 12:30</td>
<td>Lublo Monika</td>
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<tr>
<td>12:30 – 14:00</td>
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<tbody>
<tr>
<td>14:15 – 14:30</td>
<td>Turcu Daniel</td>
<td>The new forest focus EC 2152/2003 regulation and the Romanian forestry sector</td>
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<tr>
<td>14:30 – 14:50</td>
<td>Abrudan Ioan Vasile</td>
<td>Adoption of Acquis communataire regarding the forest reproductive material in Romania</td>
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<tr>
<td>14:50 – 15:10</td>
<td>Parnuta Gheorghe</td>
<td>Adoption of the “Acquis communitaire” regarding the protection of forests against atmospheric pollution and fire in Romania</td>
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<tr>
<td>15:10 – 15:30</td>
<td>Vancura Karel</td>
<td>Status of the Czech forestry legislation prior to the accession of the country to the EU</td>
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<tr>
<td>15:30 – 16:00</td>
<td>Abrudan Ioan</td>
<td>Questionnaire assessment</td>
</tr>
<tr>
<td>16:00 – 16:30</td>
<td>Abrudan Ioan</td>
<td>Coffee break and presentation of the video tape from the last year symposium (Karel Vancura)</td>
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<tr>
<td>16:35 – 17:05</td>
<td>Schmithusen Franz</td>
<td>Summary, Conclusions</td>
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<tr>
<td>17:05 – 17:50</td>
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<td>Discussions about a possible COST proposal</td>
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<tr>
<td>17:50 – 18:00</td>
<td>Herbst Peter</td>
<td>Closing of the symposium</td>
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<tr>
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### Saturday, 19 June – Whole day excursion

<table>
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<tr>
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<tr>
<td>07:30 – 08:15</td>
<td>Breakfast</td>
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<tr>
<td>8:30 -18:00</td>
<td>Excursion</td>
</tr>
<tr>
<td></td>
<td>- Route: Brasov – Bran Castle – Piatra Craiului National Park (Plaiul Foiu Hut) – Gura Barsei Hunting Lodge – Rasnov fortress</td>
</tr>
<tr>
<td></td>
<td>- Presentations on Administration of National and Natural Parks in Romania and Piatra Craiului National Park (Mr. Mihai Zotta, Protected Area Service, National Forest Administration)</td>
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<tr>
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<td>- Lunch at Plaiul Foiu Hut</td>
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<tr>
<td>18:30</td>
<td>Arrival</td>
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<tr>
<td>18:30 – 20:00</td>
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<td>- Departure</td>
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<tr>
<td></td>
<td>Departure of participants</td>
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</tbody>
</table>
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ANNEX III - THE IUFRO RESEARCH GROUP 6.13.00
FOREST LAW AND ENVIRONMENTAL LEGISLATION

HOMEPAGE: [http://iufro.boku.ac.at/iufro/iufronet/d6/hp61300.htm](http://iufro.boku.ac.at/iufro/iufronet/d6/hp61300.htm)

The Research Group on Forest Law and Environmental Legislation of the International Union of Forest Research Organization (IUFRO) was established in 1981 during the XVII th World Congress in Kyoto, Japan. At present the group has more than 60 members who contribute voluntarily according to their research interests and within the limits of their available time. More than 140 contributions presenting country case studies law developments in different parts of the world have been submitted. They have been published in a series of research proceedings.

Research papers may be submitted and are printed in English, French, German and Spanish.

If you wish to participate in the work of the IUFRO Research Group 6.13.00, please contact the Coordinator or one of the Deputies:

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ANNEX IV - RESEARCH PUBLICATIONS OF THE IUFRO GROUP
6.13.00 - FOREST LAW AND ENVIRONMENTAL LEGISLATION

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